### \*1077IHSSF2230\*



DocumentID

NONCD0002832

Site Name

MARY CHAPPEL RESIDENCE

DocumentType

Risk Assessment (RISK)

RptSegment

1

DocDate

10/29/2008

DocRcvd

10/29/2008

Box

SF2230

AccessLevel

**PUBLIC** 

Division

WASTE MANAGEMENT

Section

**SUPERFUND** 

Program

IHS (IHS)

DocCat

**FACILITY** 



SEAN BOYLES 1HS/DWM

Michael F. Easley, Governor

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen Sullins, Director Division of Water Quality

October 29, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB37049 (Richmond County/Chavis)

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

- Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.
- [] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

JIM BARBER

NorthCarolina *Naturally* 

\_\_\_

County:

RICHMOND

River Basin Report To

FROAP

Collector:

B TODD FRO

Region: Sample Matrix:

COC Yes/No

Sample Matrix: GROUNDWATER
Loc. Type: WATER SUPPLY

Emergency Yes/No

<u>Yes</u>

<u>Yes</u>

DUO E

Sample ID:

PO Number #

ooiuad.

8G1446 10/24/2008

AB37049

Date Received: Time Received:

08:00

Labworks LoginID Date Reported: HPARKER 10/27/08

Report Generated:

10/27/2008

VisitID

Loc. Descr.: 179 PEACH VIEW HAMLET

Location ID: FROAPNLC Collect Date: 10/23/2008 Collect Time:: 13:43 Sample Depth

### Sample Qualifiers and Comments

# RECEIVED

OCT 29 2000

DENR-FAYETTEVILLE REGIONAL OFFICE

### Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

- A-Value reported is the average of two or more determinations
- B1-Countable membranes with <20 colonies; Estimated
- B2- Counts from all filters were zero.
- B3- Countable membranes with more than 60 or 80 colonies; Estimated
- B4-Filters have counts of both >60 or 80 and < 20; Estimated
- B5-Too many colonies were present; too numerous to count (TNTC)
- J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
- J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
- J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

- N3-Estimated concentration is < PQL and >MDL
- NE-No established PQL
- P-Elevated PQL due to matrix interference and/or sample dilution
- Q1-Holding time exceeded prior to receipt at lab.
- Q2- Holding time exceeded following receipt by lab
- PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
- U- Samples analyzed for this compound but not detected
- X1- Sample not analyzed for this compound

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

Sample ID

AB37049

Collect Date: Collect Time:: 10/23/2008

13:43

Location ID: FROAPNLC

Loc. Descr.:

179 PEACH VIEW HAMLET

Visit ID

CAS	# Analyte Name	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Date
.AB	Sample temperature at receipt by lab Method Reference	-	1.5	°C	DSAUNDERS	HPARKER 10/24/08
OL.		· · · · · · · · · · · · · · · · · · ·		-	<del></del>	
	Volatile Organics in liquid  Method Reference EPA5030/624/8260		_TITLE_	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-78-1	Dichlorodifluoromethane Method Reference EPA5030/624/8260	1.0	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
74-87-3	Chloromethane  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-01-4	Vinyl Chloride  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
74-83-9	Bromomethane  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-00-3	Chloroethane  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-69-4	Trichlorofluoromethane  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-35-4	1,1-Dichloroethene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-09-2	Methylene Chloride  Method Reference EPA5030/624/8260	. 10	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
156-60-5	trans-1,2-Dichloroethene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
1634-04-4	Methyl Tert-Butyl Ether  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
75-34-3	1,1-Dichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
156-59-4	cis-1,2-Dichloroethene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING
74-97-5		0.25	Not detected	ug/L	ATERRY 10/25/08	10/27/08 RKELLING 10/27/08
67-66-3	Chloroform Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08
590-20-7	2,2-Dichloropropane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/25/08	RKELLING 10/27/08

Sample ID

AB37049

Collect Date: Collect Time:: 10/23/2008

13:43

Location ID:

FROAPNLC

Loc. Descr.:

179 PEACH VIEW HAMLET

Visit ID

CAS#	Analyte Name	PQL	Result Quality	fier Units	Analyst/Date	Approved By /Date
107-06-2	1,2-Dichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY	RKELLING
71-55-6	1,1,1-Trichloroethane	0.25	Netderse		10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.23	Not detected	ug/L	ATERRY	RKELLING
563-58-6	1,1-Dichloropropene	0.05			10/25/08	10/27/08
000 00-0		0.25	Not detected	ug/L	ATERRY	RKELLING
56-23-5					10/25/08	10/27/08
56-23-5	Carbon Tetrachloride	0.25	Not detected	ug/L	ATERRY	RKELLING
7	Method Reference EPA5030/624/8260				10/25/08	10/27/08
71-43-2	Benzene	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				10/25/08	10/27/08
74-95-3	Dibromomethane	1.0	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			-3/-	10/25/08	10/27/08
78-87-5	1,2-Dichloropropane	0.25	Not detected	ug/L	ATERRY	
	Method Reference EPA5030/624/8260		riot adiodica	ug/L		RKELLING
79-01-6	Trichloroethene	0.25	0.14 N3		10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	0.14 143	ug/L	ATERRY	RKELLING
75-27-4	Bromodichloromethane	0.25	N		10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY	RKELLING
10061-01-5	cis-1,3-Dichloropropene			1 - 2	10/25/08	10/27/08
10001-01-0		0.25	Not detected	ug/L	ATERRY	RKELLING
10061-02-6	2				10/25/08	10/27/08
10061-02-6	trans-1,3-Dichloropropene	0.25	Not detected	ug/L	ATERRY	RKELLING
70.00	Method Reference EPA5030/624/8260				10/25/08	10/27/08
79-00-5	1,1,2-Trichloroethane	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				10/25/08	10/27/08
108-88-3	Toluene	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			3	10/25/08	10/27/08
142-28-9	1,3-Dichloropropane	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				10/25/08	10/27/08
124-48-1	Dibromochloromethane	0.25	Not detected	ug/L	ATERRY	
	Method Reference EPA5030/624/8260		That detected	ug/L		RKELLING
106-93-4	(EDB)1,2-Dibromoethane	0.25	Not detected	11	10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.20	Hot detected	ug/L	ATERRY	RKELLING
127-18-4	Tetrachloroethene	0.25	No. de la constantina		10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY	RKELLING
108-90-7	Chlorobenzene				10/25/08	10/27/08
.00 0007		0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				10/25/08	10/27/08

Location ID: FROAPNLC

Loc. Descr.: 179 PEACH VIEW HAMLET

Visit ID

Sample ID

AB37049

Collect Date: Collect Time:: 10/23/2008

13:43

CAS#	Analyte Name	PQL	Result	Qualifier Unit	5 /	Analyst/Date	Approved By /Dat
100-41-4	Ethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
75.05.0						10/25/08	10/27/08
75-25-2	Bromoform	1.0	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260		•		_	10/25/08	10/27/08
108-38-3	m,p-Xylene	0.50	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				-3	10/25/08	10/27/08
100-42-5	Styrene	0.25	Not detected	·	ug/L	ATERRY	
	Method Reference EPA5030/624/8260				ug/L		RKELLING
79-34-5	1,1,2,2-Tetrachloroethane	0.25	Not detected			10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.23	Not detected		ug/L	ATERRY	RKELLING
630-20-6	1,1,1,2-Tetrachloroethane	0.05		· · · · · · · · · · · · · · · · · · ·		10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
95.47.6	o-Xylene					10/25/08	10/27/08
35-47-0.		0.25	Not detected		ug/L	ATERRY	RKELLING
00.10	Method Reference EPA5030/624/8260					10/25/08	10/27/08
96-18-4	1,2,3-Trichloropropane	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				· ·	10/25/08	10/27/08
98-82-8	Isopropylbenzene	0.25	Not detected	<del></del>	ug/L	ATERRY	
	Method Reference EPA5030/624/8260				ug/L	10/25/08	RKELLING
108-86-1	Bromobenzene	0.25	Not detected	<del></del>	11071		10/27/08
	Method Reference EPA5030/624/8260	,	THOI GOLOGICG		ug/L	ATERRY	RKELLING
103-65-1	n-Propylbenzene	0.25	Not detected			10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.23	Not detected		ug/L	ATERRY	RKELLING
95-49-8	2-Chlorotoluene	0.05				10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
106-43-4	4-Chlorotoluene					10/25/08	10/27/08
100-45-4		0.25	Not detected		ug/L	ATERRY	RKELLING
100.07.0						10/25/08	10/27/08
108-67-8	1,3,5-Trimethylbenzene	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				_	10/25/08	10/27/08
98-06-6	tert-Butylbenzene	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				- <del>5</del> . =	10/25/08	10/27/08
95-63-6	1,2,4-Trimethylbenzene	0.25	Not detected		ug/L	ATERRY	
	Method Reference EPA5030/624/8260		20.00.00		ug/L		RKELLING
135-98-8	sec-Butylbenzene	0.25	Not detected			10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0,23	Not detected		ug/L	ATERRY	RKELLING
543-73-1	m-Dichlorobenzene (1,3)	0.05	<u> </u>		·	10/25/08	10/27/08
	Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
	Li r3000/024/0200					10/25/08	10/27/08

Sample ID

AB37049

Collect Date: Collect Time::

10/23/2008

13:43

10/27/08

10/27/08

RKELLING

Location ID: Loc. Descr.: **FROAPNLC** 

87-61-6

1,2,3-Trichlorobenzene

Method Reference

179 PEACH VIEW HAMLET

Visit ID

CAS# **Analyte Name** PQL Result Qualifier Units Analyst/Date Approved By /Date 106-46-7 p-Dichlorobenzene (1,4) 0.25 Not detected ug/L **ATERRY** RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 95-50-1 o-Dichlorobenzene (1,2) 0.25 Not detected ug/L ATERRY RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 99-87-6 p-Isopropyltoluene 0.25 Not detected ug/L ATERRY RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 104-51-8 n-Butylbenzene 0.25 Not detected ug/L ATERRY RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 96-12-8 1,2-Dibromo-3-Chloropropane 2.0 Not detected ug/L ATERRY RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 120-82-1 1,2,4-Trichlorobenzene 0.50 Not detected ug/L ATERRY **RKELLING** Method Reference EPA5030/624/8260 10/25/08 10/27/08 91-20-3 Naphthalene 0.50 Not detected ug/L ATERRY RKELLING Method Reference EPA5030/624/8260 10/25/08 10/27/08 87-68-3 Hexachlorobutadiene 0.50 Not detected ug/L **ATERRY** RKELLING Method Reference

Not detected

1.0

EPA5030/624/8260

EPA5030/624/8260

10/25/08

10/25/08

**ATERRY** 

ug/L

GROUNDWATER FIELD/LA	BFORM	100	· FMEL	Department of	North Carolina Environment and Natural Resources
Location code 61077179 PV	SAMPLE TYPE		SAMPLE PRIORITY	ON OF WATE	ER QUALITY-GROUNDWATER SECTION
CountyRichmond	<b>∑</b> Water	,	□ Pouting	Lab	Number 861446 AB 37049
Ouad No Serial No Lat Long Report To: ARO, FRO, MRO, RRO, WaRO, V	VIRO	of Custody	Emergency (1791	Date Rec Oth	Number <u>\$61446</u> AB 37049  e Received <u>10-24-08</u> Time: <u>0800</u> c'd By: From:Bus, Courier, Hand Del., er:
WSRO, Kinston FO Fed. Trust, Central Off., Shipped by: Bus, Courier Hand Del., Other: Collector(s): BillTodd	Other:	Purpose:	Baseline (Complaint) Complian	Date ce, LUST, Pe	e Reported:esticide Study, Federal Trust, Other:
FIELD ANALYSES  pH 400 Spec. Cone Temp 10 °C Odor Appearance Field Analysis By:BillTodd LABORATORY ANALYSES	1.94at 25°C	Location or Si	ite 179 Peach Viets sampling point OUTS	ide te	miat
BOD 310 mg/L	Diss. Solids 70300	mg/L	Ag-Silver 46566	ug/L	Organochlorine Pesticides
COD High 340 mg/L	Fluoride 951	mg/L	Al-Aluminum 46557	ug/L	Organophosphorus Pesticides
COD Low 335 mg/L	Hardness: Total 900	mg/L	As-Arsenic 46551	ug/L	Nitrogen Pesticides
Coliform: MF Fecal 31616 /100ml	Hardness (non-carb) 902	mg/L	Ba-Barium 46558	ug/ <b>L</b>	Acid Herbicides
Coliform: MF Total 31504 /100ml	Phenois 32730	ug/l	Ca-Calcium 46552	mg/L	PCBs
TOC 680 mg/L	Specific Cond. 95	uMhos/cm	Cd-Cadmium 46559	ug/L	
Turbidity 76 NTU	Sulfate 945	mg/L	Cr-Chromium 46559	ug/L	
Residue, Suspended 530 mg/L	Sulfide 745	mg/L	Cu-Copper 46562	ug/L	
			Fe-Iron 46563	ug/L	. Sernivolatile Organics
	Oit and Grease	mg/L	Hg-Mercury 71900	ug/L	TPH-Diesel Range
pH 403 units			K-Potassium 46555	mg/L	Tribleseritange
Alkalinity to pH 4.5 410 mg/L			Mg-Magnesium 46554	mg/L	
Alkalinity to pH 8.3 415 mg/L			Mn-Manganese 46565	ug/L	X Volatile Organics (VOA bottle)
Carbonate 445 mg/L	NH <sub>3</sub> as N 610	mg/L	Na-Sodium 46556	mg/L	
Bicarbonate 440 mg/L	TKN as N 625	mg/L	Ni-Nickel	ug/L	TPH-Gascline Range
Carbon dioxide 405 mg/L	NO2 + NO3 as N 630	mg/L	Pb-Lead 46564		TPH-BTEX Gasoline Range
Chloride 940 mg/L	P: Total as P 665	mg/L	Se-Selenium	ug/L.	
Chromium: Hex 1032 ug/L	Nitrate (NO <sub>3</sub> as N) 620	mg/L	Zn-Zinc 46567	ug/L	
Color: True 80 CU	Nitrite (NO <sub>2</sub> as N) 615	mg/L	22	ug/L	LARTICE ONLY
Cyanide 720 mg/L		9, 2			LAB USE ONLY Temperature on arrival (°C):
Lab Comments			L		Temperature on arrival (°C):



Coleen Sullins, Director Division of Water Quality

October 20, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB36343

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

- Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.
- [] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

FOR Stephen A. Barnhardt

NorthCarolina Naturally

County:

RICHMOND

River Basin

Report To

**FROAP** 

Collector:

**B** TODD FRO

Region:

Sample Matrix: GROUNDWATER

Loc. Type:

**WATER SUPPLY** 

Emergency Yes/No COC Yes/No

YES

YES

Sample ID:

PO Number #

AB36343 8G1374 10/08/2008

Date Received: Time Received:

07:45

Labworks LoginID Date Reported:

**SMATHIS** 10/10/08 -

Report Generated:

10/10/2008

**VisitID** 

Loc. Descr.: JOHN RUSSELL

Location ID:

61077289FR

Collect Date:

10/07/2008

Collect Time::

11:34

Sample Depth

Sample Qualifiers and Comments

RECEIVED OCT 20 2008

DENR - FAYETTEVILLE REGIONAL OFFICE

### Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations

B1-Countable membranes with <20 colonies; Estimated

B2- Counts from all filters were zero.

B3- Countable membranes with more than 60 or 80 colonies; Estimated

B4-Filters have counts of both >60 or 80 and < 20; Estimated

B5-Too many colonies were present; too numerous to count (TNTC)

J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated

J3-The sample matrix interfered with the ability to make any accurate determination; Estimated

J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

N3-Estimated concentration is < PQL and >MDL

NE-No established PQL

P-Elevated PQL due to matrix interference and/or sample dilution

Q1-Holding time exceeded prior to receipt at lab.

Q2- Holding time exceeded following receipt by lab

PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity

U- Samples analyzed for this compound but not detected

X1- Sample not analyzed for this compound

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

Sample ID

AB36343

Collect Date:

10/07/2008

11:34

Location ID: Loc. Descr.: 61077289FR JOHN RUSSELL

Visit ID

Collect Time::

CAS # Analyte Name		PQL	Result	Qualifier Units	;	Analyst/Date	Approved By /Date
AB	Comple terrescent and a second at the		<del> </del>				
	Sample temperature at receipt by lab		1.9		°C	DSAUNDERS	SMATHIS
	Method Reference					10/8/08	10/8/08
OL							
	Volatile Organics in liquid		_TITLE_		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					10/8/08	10/9/08
75-78-1	Dichlorodifluoromethane	1.0	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				-3	10/8/08	10/9/08
74-87-3	Chloromethane	0.50	Not detected		ug/L	ATERRY	
	Method Reference EPA5030/624/8260		1101 00100100		ug/L	10/8/08	RKELLING
75-01-4	Vinyl Chloride	0.50	Not detected				10/9/08
	Method Reference EPA5030/624/8260	0.50	Not detected		ug/L	ATERRY	RKELLING
74-83-9	Bromomethane	·				10/8/08	10/9/08
7-1 00 0	**	0.50	Not detected		ug/L	ATERRY	RKELLING
75-00-3						10/8/08	10/9/08
75-00-3	Chloroethane	0.50	Not detected		ug/L	ATERRY	RKELLING
·	Method Reference EPA5030/624/8260					10/8/08	10/9/08
75-69-4	Trichlorofluoromethane	0.50	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				-	10/8/08	10/9/08
75-35-4	1,1-Dichloroethene	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260	•			- <b>-</b>	10/8/08	10/9/08
75-09-2	Methylene Chloride	10	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				ug/L	10/8/08	10/9/08
156-60-5	trans-1,2-Dichloroethene	0.25	Not detected	<del></del>			
	Method Reference EPA5030/624/8260	0.20	Not detected		ug/L	ATERRY	RKELLING
1634-04-4	Methyl Tert-Butyl Ether	0.25				10/8/08	10/9/08
	Method Reference EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
75-34-3	1,1-Dichloroethane					10/8/08	10/9/08
75-54-5		0.25	Not detected		ug/L	ATERRY	RKELLING
450.50.4						10/8/08	10/9/08
156-59-4	cis-1,2-Dichloroethene	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260					10/8/08	10/9/08
74-97-5	Bromochloromethane	0.25	Not detected	<del></del>	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				-	10/8/08	10/9/08
67-66-3	Chloroform	0.25	1.8	<del></del>	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				ugr =	10/8/08	
590-20-7	2,2-Dichloropropane	0.25	Not detected				10/9/08
	Method Reference EPA5030/624/8260	0.23	not detected		ug/L	ATERRY	RKELLING
						10/8/08	10/9/08

Sample ID

AB36343

Collect Date:

10/07/2008

11:34

Visit ID

Location ID:

Loc. Descr.:

61077289FR

JOHN RUSSELL

Collect Time::

CAS#		PQL	Result Qualifier	r Units	Analyst/Date	Approved By /Dat
107-06-2	1,2-Dichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY	RKELLING
	=: 1.0000/02 1/0200	2. 190			10/8/08	10/9/08
71-55-6	1,1,1-Trichloroethane	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			ug/ L	10/8/08	
563-58-6	1,1-Dichloropropene	0.25	Not detected			10/9/08
	Method Reference EPA5030/624/8260	0.20	Not detected	ug/L	ATERRY	RKELLING
56-23-5	Carbon Tetrachloride	0.25	No. 1		10/8/08	10/9/08
	Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY	RKELLING
71-43-2	Benzene				10/8/08	10/9/08
7 1-43-2	re a read	0.25	Not detected	ug/L	ATERRY	RKELLING
					10/8/08	10/9/08
74-95-3	Dibromomethane	. 1.0	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			3	10/8/08	10/9/08
78-87-5	1,2-Dichloropropane	0.25	Not detected	ug/L	ATERRY	
	Method Reference EPA5030/624/8260		3	ug/L	10/8/08	RKELLING
79-01-6	Trichloroethene	0.25	Not detected	//		10/9/08
	Method Reference EPA5030/624/8260	0.20	Not detected	ug/L	ATERRY	RKELLING
75-27-4	Bromodichloromethane	0.05			10/8/08	10/9/08
	Method Reference EPA5030/624/8260	0.25	1.3	ug/L	ATERRY	RKELLING
10061-01-5					10/8/08	10/9/08
10001-01-3	cis-1,3-Dichloropropene	0.25	Not detected	ug/L	ATERRY	RKELLING
10001 00 0	Method Reference EPA5030/624/8260				10/8/08	10/9/08
10061-02-6	trans-1,3-Dichloropropene	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260				10/8/08	10/9/08
79-00-5	1,1,2-Trichloroethane	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			-3	10/8/08	10/9/08
108-88-3	Toluene	0.25	0.23 N3	ug/L	ATERRY	
	Method Reference EPA5030/624/8260			ug/L		RKELLING
142-28-9	1,3-Dichloropropane	0.25	Not detected		10/8/08	10/9/08
	Method Reference EPA5030/624/8260	0.20	Not detected	ug/L	ATERRY	RKELLING
124-48-1	Dibromochloromethane	0.05			10/8/08	10/9/08
	Method Reference EPA5030/624/8260	0.25	1.4	ug/L	ATERRY	RKELLING
106-93-4					10/8/08	10/9/08
100-33-4	(EDB)1,2-Dibromoethane	0.25	Not detected	ug/L	ATERRY	RKELLING
107.10.1	Method Reference EPA5030/624/8260	16			10/8/08	10/9/08
127-18-4	Tetrachloroethene	0.25	Not detected	ug/L	ATERRY	RKELLING
	Method Reference EPA5030/624/8260			- 3· <b>-</b>	10/8/08	10/9/08
108-90-7	Chlorobenzene	0.25	Not detected	ug/L	ATERRY	RKELLING

Sample ID

AB36343

Collect Date: Collect Time:: 10/07/2008

11:34

Location ID:

61077289FR

Loc. Descr.: Visit

JOHN RUSSELL

sit ID							out initial.	11.54
	CAS#	Analyte Name	PQL	Result	Qualifier	Units	Analyst/Date	Approved By
	100-41-4	Ethylbenzene Method Reference EPA5030/624/8260	0.25	Not detected	<u> </u>	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
	75-25-2	Bromoform  Method Reference EPA5030/624/8260	1.0	0.73	N3	ug/L	ATERRY	RKELLING

			ruc	Result	Qualifier	Units	Analyst/Date	Approved By /Dat
100-41-4	Ethylbenzene		0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260	_			-	10/8/08	10/9/08
75-25-2	Bromoform		1.0	0.73	N3	ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				J	10/8/08	10/9/08
108-38-3	m,p-Xylene		0.50	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				· <b>J</b> –	10/8/08	10/9/08
100-42-5	Styrene		0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				-5-	10/8/08	10/9/08
79-34-5	1,1,2,2-Tetrachloroet	hane	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				-9	10/8/08	10/9/08
630-20-6	1,1,1,2-Tetrachloroet	hane	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ug/L	10/8/08	10/9/08
95-47-6	o-Xylene	<u> </u>	0.25	Not detected		ug/L	ATERRY	
	Method Reference	EPA5030/624/8260	0.20	Not detected		ug/L	10/8/08	RKELLING
96-18-4	1,2,3-Trichloropropar	ne	0.25	Not detected		//		10/9/08
	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	ATERRY	RKELLING
98-82-8	Isopropylbenzene		0.25	Not detected			10/8/08	10/9/08
	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	ATERRY	RKELLING
108-86-1	Bromobenzene	2.7.0000702.70200	0.05	N	<del></del>		10/8/08	10/9/08
.00 00 1	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	ATERRY	RKELLING
103-65-1	n-Propylbenzene	LI 73030/024/8200					10/8/08	10/9/08
100-00-1	Method Reference	EDA E030/034/0300	0.25	Not detected		ug/L	ATERRY	RKELLING
95-49-8		EPA5030/624/8260					10/8/08	10/9/08
30-43-0	2-Chlorotoluene Method Reference	FD + 5000 100 + 1000 1	0.25	Not detected		ug/L	ATERRY .	RKELLING
100 42 4		EPA5030/624/8260					10/8/08	10/9/08
106-43-4	4-Chlorotoluene		0.25	Not detected		ug/L	ATERRY	RKELLING
400.07.0	Method Reference	EPA5030/624/8260					10/8/08	10/9/08
108-67-8	1,3,5-Trimethylbenze		0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260					10/8/08	10/9/08
98-06-6	tert-Butylbenzene	· · · · · · · · · · · · · · · · · · ·	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				-	10/8/08	10/9/08
95-63-6	1,2,4-Trimethylbenze	ne	0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				-3	10/8/08	10/9/08
135-98-8	sec-Butylbenzene		0.25	Not detected		ug/L	ATERRY	RKELLING
	Method Reference	EPA5030/624/8260				0g, <b>L</b>	10/8/08	10/9/08
543-73-1	m-Dichlorobenzene (	1,3)	0.25	Not detected		ug/L	ATERRY	
	Method Reference	EPA5030/624/8260		30.00.00		ug/L	10/8/08	RKELLING 10/9/08

Sample ID

AB36343

Collect Date: Collect Time::

10/07/2008

11:34

Location ID: Loc. Descri 61077289FR

JOHN RUSSELL

LUC.	Desci	••
Visit	חו	

CAS #	Analyte Name	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Dat
106-46-7	p-Dichlorobenzene (1,4) Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/8/08	RKELLING
95-50-1	o-Dichlorobenzene (1,2)  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/8/08	RKELLING
99-87-6	p-Isopropyltoluene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/8/08	10/9/08 RKELLING 10/9/08
104-51-8	n-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
96-12-8	1,2-Dibromo-3-Chloropropane  Method Reference EPA5030/624/8260	2.0	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
120-82-1	1,2,4-Trichlorobenzene Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
91-20-3	Naphthalene Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
87-68-3	Hexachlorobutadiene  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08
87-61-6	1,2,3-Trichlorobenzene Method Reference EPA5030/624/8260	1.0	Not detected	ug/L	ATERRY 10/8/08	RKELLING 10/9/08

					MA	P				•
GROUNDWATE	R FIELD/L	AB	FORM			П	. /	Denartment	of Env	North Carolina vironment and Natural Resources
Location code_	077289 FR			CAMPLE		1		DIVISION OF WA	TER (	QUALITY-GROUNDWATER SECTION
CountyRichmond				SAMPLE TY			Routine			374 A636343
Quad No	Serial No			☐ Soil		<u> </u>	Emergency	(289FR) L	ab Nu	umber
Lat	Long.		<del></del>	☐ Other			Linergency		ate R	eceived 10-08-08 Time: 0745
_			·		in of Custody				ec'd E	By: / A From Bus, Courier Hand Del.
Report To: ARO, FRO MR	O, RRO, WaRO,	WiR	o, l		Custody			1	ther:_	<del></del>
WSRO, Kinston FO, Fed. T	Trust, Central Off	Oth	or.					D:	ata E	ntry By: Ck:
Shipped by: Bus, Courier)	Hand Del., Other:				Purpose	e:				eported:
Collector(s):BillTodd			Date 10	17/08 Tin	ne 11'. 34	Bas	eline Complaint	Compliance, LUST.	Pesti	cide Study, Federal Trust, Other:
FIELD ANALYSES						۱ سید		(circle one)		ords orday, rederar ridst, other
pH <sub>400</sub> Temp. <sub>10</sub> Appearance	Spec Cor	nd .		ct 259C	Owner	<u>ا 0 ل</u>	nn Rus	ssell		
Temp. <sub>10</sub>	°C Odor	10.94		at 25°C	Location or S	site_	289 For	X Road		
rippedianee					Sampling Me	othod Sai	inpling point	outside ta	₽_	
Field Analysis		-			Remarks	N		STOPPING Spatier rate I	<del>.</del> –	Sample Interval
By:BillTodd	350			·						, air temp., etc.)
LABORATORY ANALYS			<del></del>						•	, , , , , , , , , , , , , , , , , , , ,
COD High 340	mg/L	_	Diss. Solids		mg/L		Ag-Silver 46566	ug/L	٦	Organochlorine Pesticides
COD Low 335	mg/L	$\vdash$	Fluoride 95		mg/L		Al-Aluminum 4655		1	Organophosphorus Pesticides
Coliform: MF Fecal 31616	mg/L	-	Hardness:	Total 900	mg/L		As-Arsenic 46551	ug/L	1	Nitrogen Pesticides
Colliform: MF Total 31504	/100ml	-	<del></del>	non-carb) 902	mg/L		Ba-Barium 46558	ug/L	1	Acid Herbicides
TOC 680	/100ml	_	Phenois 32	<del></del>	ug/l		Ca-Calcium 46552		1 -	PCBs
Turbidity 76	mg/L		Specific Co		uMhos/cm	.	Cd-Cadmium 4655		1	1.003
Residue, Suspended 530	NTU	<u> </u>	Sulfate 945	<del></del>	mg/L		Cr-Chromium 465		1  -	
residue, Suspended 530	mg/L	-	Sulfide 745		mg/L		Cu-Copper 46562	ug/L	1	
		-					Fe-Iron 46563	ug/L	1	Semivolatile Organics
pH 403		-	Oil and Gre	ase	mg/L		Hg-Mercury 71900		1 📑	TPH-Diesel Range
Alkalinity to pH 4.5 410	units	-				<u> </u>	K-Potassium 4655	5 mg/L	1	
Alkalinity to pH 8 3 415	mg/L mg/L					<u> </u>	Mg-Magnesium 46		1	
Carbonate 445		-	NILL CONT.			-	Mn-Manganese 46	565 ug/L	1 X	Volatile Organics (VOA bottle)
Bicarbonate 440	mg/L		NH <sub>3</sub> as N 6		mg/L		Na-Sodium 46556	mg/L		TPH-Gasoline Range
Carbon dioxide 405	mg/L	-	TKN as N 6		mg/L	<u> </u>	Ni-Nickel	ug/L	1 -	TPH-BTEX Gasoline Range
Chloride 940	mg/L mg/L	+	NO <sub>2</sub> + NO <sub>3</sub>		mg/L	<u> </u>	Pb-Lead 46564	ug/L		
Chromium: Hex 1032	ug/L	-	P: Total as		mg/L	<u> </u>	Se-Setenium	ug/L		
Color: True 80	CU	$\vdash$	Nitrate (NO		mg/L	<u> </u>	Zn-Zinc 46567	ug/L		
Cyanide 720			Nitrite (NO <sub>2</sub>	as N) 615	mg/L	<b> </b>			LA	B USE ONLY
Lab Comments	mg/L	<u> </u>							Te	mperature on arrival (°C):
	<del></del>									1, 1
			<del></del>				<del></del>			
GW-54 REV. 7/03 For D	Dissolved Analysis-sub	mit filt	ered sample a	ind write "DIS" in t	olock.					



### North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director

**Division of Waste Management** 

Michael F. Easley, Governor William G. Ross Jr., Secretary

October 3, 2008

Ms. Mary Chapell 1061 Hwy 177 North Hamlet, North Carolina

Subject: Health Risk Evaluation and Alternate Water Service Request

Mary Chappell Residence, 1061 HWY 177, Hamlet, Richmond County

Dear Ms. Chappell:

This is to inform you that the incident management responsibilities for the above-referenced pollution site have recently changed from the Aquifer Protection Section to the Division of Waste Management's Inactive Sites Branch (IHSB) in the Fayetteville Regional Office. Attached you will find a copy of the health risk evaluation with recommendations concerning the continued use of your supply well. Also attached is an affidavit that should be completed to determine if you qualify for potential assistance in obtaining alternate water service through the Bernard Allen Memorial Drinking Water Fund.

You may already be receiving bottled water service because of an investigation that is being conducted to investigate pesticides and associated chemicals around peach orchards. However, the constituent that is showing up in your supply well is typically related to dry cleaning operations or as solvents used in automotive work. Because the contamination found in your well is not a pesticide, the bottled water service could be discontinued at any time.

Therefore, you should review the attached affidavit to be signed and notarized to determine if you meet the requirements for eligibility. If you do qualify, please return the completed affidavit in the enclosed envelope in order that we may be able to recommend it to the Department of Environment, Health and Natural Resources for potential assistance through the Bernard Allen Fund.

Should you have any questions or concerns about this information, please feel free to call me at 910.433.3345.

Sincerely,

P. Sean Boyles, L.G. Hydro geologist

Inactive Hazardous Sites Branch

Attachment

cc: C

Cindy Pearson, 1217 HWY 177 North, Mariston, NC 28363 IHS Files

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone 919-508-8400 \ FAX 919-715-3605 \ Internet <a href="http://wastenotnc.org">http://wastenotnc.org</a>
An Equal Opportunity/Affirmative action Employer – 50% Recycled/10% Post-Consumer Paper

### Memorandum:

Date:

September 25, 2008

TO:

Sean Boyles

Fayetteville Regional Office Inactive Hazardous Sites Branch

FROM:

Hanna Assefa

Industrial Hygiene Consultant Inactive Hazardous Sites Branch

RE:

Health Risk Evaluation Mary Chappel Residence 1061 Hwy 177 North,

Hamlet, Richmond County, North Carolina

During this sampling event, one contaminant was detected in the well water. The contaminant, trichloroethene, was detected at a concentration exceeding the applicable water standard. The standards used to determine if the water is suitable for drinking and cooking are the United States Environmental Protection Agency's Maximum Contaminant Levels (MCLs) or, if no MCLs exist, North Carolina Groundwater Standards (2L).

If the contaminant concentration exceeds the applicable standard for using the water for drinking and cooking, the contaminant concentration is further analyzed to determine if the water is suitable for other household uses, such as showering, bathing, washing dishes, flushing toilets, and hand washing. Based on this evaluation the water from this well should not be used for drinking and cooking. The water from this well can be used for all other purposes described above. The table below compares the detected contaminant concentration with the applicable standards:

Sample ID Contaminant GWO -77142 Trichloroethene	Conceptration (ug/l)		21-(ug/l)
GWO -77142 Trichloroethene	1 36	5	NA

Shaded boxes indicate a standard has been exceeded. NA – Not Applicable

## NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

IN	THE MATTER OF:	Bernard Alle Eligibility by	en Memoria Mary C	al Emergency Drinkir happell	ng Water Fund
NO	DER THE AUTHOR RTH CAROLINA G ATUTES § 87-98	RITY OF SENERAL	)	AFFIDAVIT RE: Household Inc	come Verification
Keni	neth Vernon, being d	ıly sworn, here	by deposes a	and says:	
1.	I am/we are the own Richmond County,	ner of property North Carolina	generally re	ferred to as 1061 HWY	7 177 North, Hamlet,
2. (Beger	emara Allen Memoria	al Emergency D	rinkino Wa	North Carolina General ter Fund) for an alternanter, Richmond County	Statute (N.C.G.S.) § 87-98 ate water supply for the property North Carolina.
3.	is not greater than the	uce hundred pe ant of Health and	t), in that my rcent (300% d Human Se	v/our household gross	
	Persons in fan		D	***************************************	or common
	1			\$10,210 13,690	
	For families was I hereby certify, under	ith more than 8 or the pains and amination resulvater Fund	persons, ad	d \$3,480 for each addid	tional person.  e not caused or contributed to for use of the Bernard Allen
Sig	nature/Printed Name				Date
Sw	orn to and subscribed	l before me			
this	s day of	<del></del>	, 20	··	
				Notary Public	
Му	commission expires				(SEAL)

### October 3, 2008

### <u>MEMORANDUM</u>

TO: Hanna Assefa, Industrial Hygienist

Superfund Section, Inactive Hazardous Site Branch (IHSB)

FROM: Sean Boyles

Fayetteville Regional Office, IHSB

RE: Health Risk Evaluation Request

William Brown Residence, 115 Fruitland Road Hamlet, Richmond County, North Carolina

This sample was collected from a private residential supply well as part of investigation for pesticides around peach orchards. An analysis for volatile organic compounds was performed and the following constituents were detected:

Analyte	Detected	Units	2L Groundwater
	Concentration		Standard
Trichloroethene	1.2	ug/L	2.8 ug/L

If you have any questions, please give me a call at 910.433.3345.

### October 3, 2008

### <u>MEMORANDUM</u>

TO:

Hanna Assefa, Industrial Hygienist

Superfund Section, Inactive Hazardous Site Branch (IHSB)

FROM:

Sean Boyles

Fayetteville Regional Office, IHSB

RE:

Health Risk Evaluation Request

Anna Harrison Residence, 961 N. Hwy 177 Hamlet, Richmond County, North Carolina

This sample was collected from a private residential supply well as part of investigation for pesticides around peach orchards. An analysis for volatile organic compounds was performed and the following constituents were detected:

Analyte	Detected	Units	2L Groundwater
	Concentration		Standard
Trichloroethene	0.12	ug/L	2.8 ug/L
Naphthalene	0.32	ug/l	21 ug/l
1,4-dichlorobenzene	0.26	ug/l	1.4 ug/l

If you have any questions, please give me a call at 910.433.3345.





Coleen Sullins, Director Division of Water Quality

September 29, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB35625

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

$[\ ]$	Based on the sample results, your water is safe for all uses.	. It is recommended that the water be
	tested every six months to make sure it is still safe.	

[]	Based on the sample results, elevated levels of the pesticides were detected. It is recommended
	that the water should not be used for cooking or drinking. Also, it is recommended that
	showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

orthCarolina

County:

RICHMOND

River Basin Report To

**FROAP** 

Collector:

B TODD FRO

Region:

Sample Matrix: **GROUNDWATER** 

Loc. Type: **WATER SUPPLY** Emergency Yes/No

COC Yes/No

YES **YES** 

Sample ID:

PO Number #

8G1282 09/18/2008

Date Received:

08:00

AB35625

Time Received: Labworks LoginID

**SMATHIS** 9/23/08

Date Reported:

Report Generated:

09/23/2008

VisitID

Loc. Descr.: ANNA HARRISON

Location ID:

6I077961NC177

Collect Date:

09/17/2008

Collect Time::

13:16

Sample Depth

Sample Qualifiers and Comments

#### Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations

B1-Countable membranes with <20 colonies; Estimated

B2- Counts from all filters were zero.

B3- Countable membranes with more than 60 or 80 colonies; Estimated

B4-Filters have counts of both >60 or 80 and < 20; Estimated

B5-Too many colonies were present; too numerous to count (TNTC)

J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated

J3-The sample matrix interfered with the ability to make any accurate determination; Estimated

J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

N3-Estimated concentration is < PQL and >MDL

NE-No established PQL

P-Elevated PQL due to matrix interference and/or sample dilution

Q1-Holding time exceeded prior to receipt at lab.

Q2- Holding time exceeded following receipt by lab

PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity

U- Samples analyzed for this compound but not detected

X1- Sample not analyzed for this compound

Sample ID

AB35625

Collect Date:

09/17/2008

13:16

Location ID: Loc. Descr.: 6I077961NC177

Visit ID

**ANNA HARRISON** Collect Time::

CAS #			PQL	Result Q	ualifier	Units	Analyst/Date	Approved By /Date
	Sample temperature at re	celpt by lab		1.6		•c	. HPARKER	SMATHIS
	Method Reference						9/18/08	. 9/18/08
OL				<del></del>				
	Volatile Organics in liquid			_TITLE_		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
75-78-1	Dichlorodifluoromethane		1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				J	9/18/08	9/23/08
74-87-3	Chloromethane		0.50	Not detected		υg/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
75-01-4	Vinyl Chloride		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				- <b></b>	9/18/08	9/23/08
74-83-9	Bromomethane		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-9-	9/18/08	9/23/08
75-00-3	Chloroethane		0.50	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				ug L	9/18/08	RKELLING 9/23/08
75-69-4	Trichlorofluoromethane		0.50	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260	•			ug-L	9/18/08	RKELLING 9/23/08
75-35-4	1,1-Dichloroethene		0.25	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260		***************************************		cyr	9/18/08	RKELLING 9/23/08
75-09-2	Methylene Chloride		10	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				ugr	9/18/08	RKELLING
156-60-5	trans-1,2-Dichloroethene	<del></del>	0.25	Not detected		ug/L		9/23/08
	Method Reference	EPA5030/624/8260	0.20	Not delected		ug/L	VANDREWS	RKELLING
1634-04-4	Methyl Tert-Butyl Ether		0.25	Not detected			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	VANDREWS	RKELLING
75-34-3	1,1-Dichloroethane		0.25	Not detected			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	VANDREWS	RKELLING
156-59-4	ds-1,2-Dichloroethene		0.25	Not data stad		<del></del>	9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.20	Not detected		ug/L	VANDREWS	RKELLING
74-97-5	Bromochloromethane		0.25	Not detect			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
67-66-3	Chloroform		0.25	Nan La La			9/18/08	9/23/08
J. 30-0	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
590-20-7	2,2-Dichloropropane		0.05				9/18/08	9/23/08
000 20-1	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
107-06-2	1,2-Dichloroethane						9/18/08	9/23/08
107-00-2	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EFM3U3U/024/826U					9/18/08	9/23/08

Sample ID

AB35625

Collect Date: Collect Time:: 09/17/2008

13:16

Location ID: Loc. Descr.: 61077961NC177

ANNA HARRISON

Visit ID

CAS#	Analyte Na	me ·	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
563-58-6	1,1-Dichloropropene		0.25	Not detected	-	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
56-23-5	Carbon Tetrachloride		0.25	Not detected		ug/L	· VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
71-43-2	Benzene	<del></del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				J	9/18/08	9/23/08
74-95-3	Dibromomethane		1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-5-	9/18/08	9/23/08
78-87-5	1,2-Dichloropropane		0.25	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
79-01-6	Trichloroethene		0.25	, 0.12	N3	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		, 5	•••	-y-	9/18/08	9/23/08
75-27-4	Bromodichloromethane	·	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				, agre	9/18/08	9/23/08
10061-01-5	ds-1,3-Dichloropropene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-9-	9/18/08	9/23/08
10061-02-6	trans-1,3-Dichloropropene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				092	9/18/08	9/23/08
79-00-5	1,1,2-Trichloroethane	·	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		,,,,,		ug c	9/18/08	9/23/08
108-88-3	Toluene	-	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-9-	9/18/08	9/23/08
142-28-9	1,3-Dichloropropane		0.25	Not detected		ug/L	VANDREWS	. RKELLING
	Method Reference	EPA5030/624/8260				-9-L	9/18/08	9/23/08
124-48-1	Dibromochloromethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-g-	9/18/08	9/23/08
106-93-4	(EDB)1,2-Dibromoethane	<del>"</del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	•			- Jan 1	9/18/08	9/23/08
127-18-4	Tetrachloroethene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				- GFE	9/18/08	9/23/08
108-90-7	Chlorobenzene		0.25	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	•			-gr	9/18/08	9/23/08
100-41-4	Ethylbenzene •		0.25	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260		31 00100100		ugr	9/18/08	RKELLING 9/23/08

Sample ID

AB35625

Collect Date:

Location ID:

61077961NC177

Visit ID

09/17/2008 Loc. Descr.: ANNA HARRISON Collect Time:: 13:16 CAS# Analyte Name PQL Result Qualifier Units

	Analyte Na		PQL	Result Qualifie	er Units	Analyst/Date	Approved By /Date
75-25-2	Bromoform		1.0	Not detected	ug/L	VANDELUO	
	Method Reference	EPA5030/624/8260			ug/L	VANDREWS	RKELLING
108-38-3	m,p-Xylene		0.50	Mak data at 1		9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS	RKELLING
100-42-5						9/18/08	9/23/08
100 42 0	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
70.24.5						9/18/08	9/23/08
19-34-5	1,1,2,2-Tetrachloroethane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
630-20-6	1,1,1,2-Tetrachloroethane	•	0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	•		•	9/18/08	9/23/08
95-47-6	o-Xylene		0.25	Not detected	ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260			- <b></b>	9/18/08	RKELLING
96-18-4	1,2,3-Trichloropropane	<u> </u>	0.25	Not detected			9/23/08
	Method Reference	EPA5030/624/8260		1101 40100100	ug/L	VANDREWS	RKELLING
98-82-8	Isopropylbenzene		0.25	Not detected		9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	, 0.20	Not detected	ug/L	VANDREWS	RKELLING
108-86-1	Bromobenzene		0.25		<u> </u>	9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
103-65-1	n-Propylbenzene					9/18/08	9/23/08
100 00-1	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING '
95-49-8		EFA3030/024/8200				9/18/08	9/23/08
33-45-6	2-Chlorotoluene		0.25	Not detected	ug/L	VANDREWS	RKELLING
100 10	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
106-43-4	4-Chlorotoluene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08
108-67-8	1,3,5-Trimethylbenzene		0.25	Not detected	ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260			- <b>y-</b>	9/18/08	RKELLING 9/23/08
98-06-6	tert-Butylbenzene		0.25	Not detected	ug/L		
	Method Reference	EPA5030/624/8260			ugr	VANDREWS	RKELLING
95-63-6	1,2,4-Trimethylbenzene		0.25	Not detected		9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.20	. Not detected	ug/L	VANDREWS	RKELLING
135-98-8	sec-Butylbenzene		0.25			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0. <u>2</u> 5	Not detected	ug/L	VANDREWS	RKELLING
543-73-1	m-Dichlorobenzene (1,3)					9/18/08	9/23/08
• •	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
106-46-7		Lr 73030/024/8200				9/18/08	9/23/08
100-40-/	p-Dichlorobenzene (1,4)	55.5	0.25	0.26	ug/L	VANDREWS	RKELLING
·	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08

0.50

0.50

1.0

Sample ID

ug/L

ug/L

ug/L

ug/L

AB35625

Collect Date: Collect Time::

**VANDREWS** 

VANDREWS

VANDREWS

VANDREWS

9/18/08

9/18/08

9/18/08

9/18/08

09/17/2008 13:16

RKELLING

RKELLING

RKELLING

RKELLING

9/23/08

9/23/08

9/23/08

9/23/08

Lacation ID: Loc. Descr.: 61077961NC177

91-20-3

87-68-3

87-61-6

**ANNA HARRISON** 

Method Reference

Method Reference

Method Reference

1,2,3-Trichlorobenzene

Method Reference

Hexachlorobutadiene

Naphthalene

EPA5030/624/8260

EPA5030/624/8260

EPA5030/624/8260

EPA5030/624/8260

Visi<sub>k</sub>ID

CAS#	Analyte N	lame	PQL	Result Qualifier	Units A	nalyst/Date	Approved By /Date
95-50-1	o-Dichlorobenzene (1,2	)	0.25	Not detected	ug/L		
	Method Reference	EPA5030/624/8260			ugre	VANDREWS 9/18/08	RKELLING 9/23/08
99-87-6	p-Isopropyltoluene Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
104-51-8	n-Butylbenzene	L1 73030/024/8200	0.25	Not detected	uall.	9/18/08	9/23/08
	Method Reference	EPA5030/624/8260		Not detected	ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
96-12-8	1,2-Dibromo-3-Chloropr	•	2.0	Not detected	ug/L	VANDREWS	RKELLING
120-82-1	1,2,4-Trichlorobenzene	EPA5030/624/8260				9/18/08	9/23/08
· ·	I)=  I III III II II II II II II II II II I		0.50	Not detected	ua/L	VANDREWS	DVELLING

Not detected

Not detected

0.32

N3

GROUNDWATER	FIELD/LA	B FORM	$-\mathcal{M}\mathcal{M}$		D	North Carolina	282
Location code610			E TYPE		Department of DIVISION OF WA	of Environment and Natural Resources TER QUALITY-GROUNDWATER SECTIO	N
CountyRichmond		₩ Wa		SAMPLE PRIORITY  Routine		b NumberAB35	1,25
Quad No So Lat Lo	ong	Li Othi	er _	Emergency	(461 NC177) Da	ate Received 9/18/08 Time: 6ec'd By: HP From:Bus Cour	0800
Report To: ARO, FRO, MRO, WSRO, Kinston FO, Fed. Tru Shipped by: Bus, Courie) Ha Collector(s):BillTodd	st, Central Off., ( nd Del., Other:	Other:	Durages		Da Da	ner:ck:Ck:_ ata Entry By:Ck:_ ate Reported:	
FIELD ANALYSES  pH 400  Temp.10  Appearance			_ 1\	ma Hai	rrisan	Pesticide Study, Federal Trust, Other:	
Temp. <sub>10</sub>	°C Odor		Description of Sampling Meth	sampling point	Hour 17 Outside + Oump Topymo balar elc.	Sample Interval	
LÁBORATORY ANALYSE					(Pumpin	g time, air temp., etc.)	
COD High 340  COD Low 335	mg/L mg/L	Diss. Solids 70300 Fluoride 951	mg/L mg/L	Ag-Silver 46566 Al-Aluminum 46557	ug/L	Organochlorine Pesticides	
Coliform: MF Fecal 31616	/100ml	Hardness: Total 900 Hardness (non-carb) 90	mg/L 02 mg/L	As-Arsenic 46551 Ba-Barium 46558	ug/L ug/L	Organophosphorus Pesticides Nitrogen Pesticides	
Coliform: MF Total 31504 TOC 680	/100ml mg/L	Phenois 32730 Specific Cond. 95	ug/l uMhos/cm	Ca-Calcium 46552	ug/L mg/L	Acid Herbicides PCBs	
Turbidity 76 Residue, Suspended 530	NTU mg/L	Sulfate 945 Sulfide 745	mg/L	Cd-Cadmium 46559	ug/L }		
		Oil and Grease	mg/L	Cu-Copper 46562 Fe-Iron 46563	ug/L ug/L	Semivolatile Organics	
pH 403 Alkalinity to pH 4.5 410	units mg/L		ing/E	Hg-Mercury 71900 K-Potassium 46555	ug/L mg/L	TPH-Diesel Range	
Alkalinity to pH 8.3 415 Carbonate 445	mg/L mg/L	NH <sub>3</sub> as N 610	mg/L	Mg-Magnesium 465 Mn-Manganese 465		X Volatile Organics (VOA bottle)	
Bicarbonate 440 Carbon dioxide 405	mg/L mg/L	TKN as N 625 NO <sub>2</sub> + NO <sub>3</sub> as N 630	mg/L . mg/L	Na-Sodium 46556 Ni-Nickel Pb-Lead 46564	mg/L ug/L	TPH-Gasoline Range TPH-BTEX Gasoline Range	
Chloride 940 Chromium: Hex 1032	mg/L ug/L	P: Total as P 665 Nitrate (NO <sub>3</sub> as N) 620	mg/L mg/L	Se-Selenium Zn-Zinc 46567	ug/L · ug/L		
Color: True 80 Cyanide 720	CU mg/L	Nitrite (NO <sub>2</sub> as N) 615	mg/L	ZIPZIIIC 4030/	ug/L	LAB USE ONLY	
Lab Comments						Temperature on arrival (°C):	<del></del>



Michael F. Easley, Governor

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen Sullins, Director Division of Water Quality

October 27, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB36357

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

NorthCarolina Naturally

County:

RICHMOND

River Basin

Report To FROAP

Collector: Region:

Loc. Type:

COC Yes/No

B TODD **FRO** 

Sample Matrix: GROUNDWATER

**WATER SUPPLY** 

Emergency Yes/No

**YES** <u>YES</u> RECEIVED

OCT 27,2008

Sample ID:

PO Number # Date Received:

8G1388 10/08/2008

AB36357

Time Received: Labworks LoginID

07:45 **SMATHIS** 

Date Reported: Report Generated: 10/10/08 10/23/2008

Loc. Descr.: HERMAN RUSSELL

Location ID:

61077127FLR

Collect Date:

10/07/2008

Collect Time:: 16:00

Sample Depth

Sample Qualifiers and Comments

#### Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

- A-Value reported is the average of two or more determinations
- B1-Countable membranes with <20 colonies; Estimated
- B2- Counts from all filters were zero.
- B3- Countable membranes with more than 60 or 80 colonies; Estimated
- B4-Filters have counts of both >60 or 80 and < 20; Estimated
- B5-Too many colonies were present; too numerous to count (TNTC)
- J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated
- J3-The sample matrix interfered with the ability to make any accurate determination; Estimated
- J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

- N3-Estimated concentration is < PQL and >MDL
- NE-No established PQL
- P-Elevated PQL due to matrix interference and/or sample dilution
- Q1-Holding time exceeded prior to receipt at lab.
- Q2- Holding time exceeded following receipt by lab
- PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity
- U- Samples analyzed for this compound but not detected
- X1- Sample not analyzed for this compound
- N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

Sample ID

AB36357

Collect Date:

10/07/2008

Collect Time::

16:00

Location ID:

61077127FLR

RUSSELL

Loc. Descr.:	HERMAN
Vicit ID	

CAS #	Analyte Name	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Date
В	Sample temperature at receipt by lab Method Reference		1.9	°C	DSAUNDERS 10/8/08	SMATHIS 10/8/08
DL	Volatile Organics in liquid  Method Reference EPA5030/624/8260		_TITLE_	ug/L	VANDREWS 10/9/08	RKELLING
75-78-1	Dichlorodifluoromethane  Method Reference EPA5030/624/8260	1.0	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
74-87-3	Chloromethane Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-01-4	Vinyl Chloride  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-83-9	Bromomethane Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-00-3	Chloroethane Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-69-4	Trichlorofluoromethane  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-35-4	1,1-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-09-2	Methylene Chloride  Method Reference EPA5030/624/8260	10	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
156-60-5	trans-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING
1634-04-4	Methyl Tert-Butyl Ether Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
75-34-3	1,1-Dichloroethane Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
156-59-4	cis-1,2-Dichloroethene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
74-97-5	Bromochloromethane Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
67-66-3	Chloroform Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
590-20-7	2,2-Dichloropropane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08

Sample ID

AB36357

Collect Date:

10/07/2008

Collect Time::

16:00

Location ID:

61077127FLR

Loc. Descr.:	HERMAN RUSSELL
Visit ID	

CAS#	Analyte Name	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Date
107-06-2	1,2-Dichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
71-55-6	1,1,1-Trichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
563-58-6	1,1-Dichloropropene	0.25	Not detected		10/9/08	10/10/08
	Method Reference EPA5030/624/8260		Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
56-23-5	Carbon Tetrachloride  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
71-43-2	Benzene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
74-95-3	Dibromomethane  Method Reference EPA5030/624/8260	1.0	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
78-87-5	1,2-Dichloropropane Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
79-01-6	Trichloroethene  Method Reference EPA5030/624/8260	0.25	0.30	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-27-4	Bromodichloromethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
10061-01-5	cis-1,3-Dichloropropene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
10061-02-6	trans-1,3-Dichloropropene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
79-00-5	1,1,2-Trichloroethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-88-3	Toluene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
142-28-9	1,3-Dichloropropane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
124-48-1	Dibromochloromethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
106-93-4	(EDB)1,2-Dibromoethane  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING
127-18-4	Tetrachloroethene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
108-90-7	Chlorobenzene  Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08

Sample ID

AB36357

Collect Date: Collect Time::

10/07/2008

16:00

Location ID:

61077127FLR

Loc. Descr.:

HERMAN RUSSELL

Visit ID

	CAS#	Analyte N	ame	PQL	Result Q	ualifier	Units	Analyst/Date	Approved By /Date
100	0-41-4	Ethylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected	<u>.</u>	ug/L	VANDREWS	RKELLING
75	5-25-2	Bromoform		1.0	Not detected		<del></del>	10/3/03	10/10/08

CAS#			PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
100-41-4	Ethylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected	···	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
75-25-2	Bromoform Method Reference	EPA5030/624/8260	1.0	Not detected	· · · <u>·</u> · · · ·	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-38-3	m,p-Xylene Method Reference	EPA5030/624/8260	0.50	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
100-42-5	Styrene Method Reference	EPA5030/624/8260	0.25	Not detected	·	ug/L	VANDREWS	RKELLING 10/10/08
79-34-5	1,1,2,2-Tetrachloroeth Method Reference	nane EPA5030/624/8260	0.25	Not detected	-	ug/L	VANDREWS	RKELLING 10/10/08
630-20-6	1,1,1,2-Tetrachloroeth Method Reference	nane EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-47-6	o-Xylene Method Reference	EPA5030/624/8260	0.25	Not detected	<del></del>	ug/L	VANDREWS	RKELLING 10/10/08
96-18-4	1,2,3-Trichloropropan Method Reference	e EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
98-82-8	Isopropylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
108-86-1	Bromobenzene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING - 10/10/08
103-65-1	n-Propylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
95-49-8	2-Chlorotoluene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING 10/10/08
106-43-4	4-Chlorotoluene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING 10/10/08
108-67-8	1,3,5-Trimethylbenzer Method Reference	ne EPA5030/624/8260	0,25	Not detected	<del></del>	ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
98-06-6	tert-Butylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected	·	ug/L	VANDREWS	RKELLING 10/10/08
95-63-6	1,2,4-Trimethylbenzer Method Reference	ne EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING 10/10/08
135-98-8	sec-Butylbenzene Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS 10/9/08	RKELLING 10/10/08
543-73-1	m-Dichlorobenzene (1 Method Reference	,3) EPA5030/624/8260	0.25	Not detected		. ug/L	VANDREWS 10/9/08	RKELLING 10/10/08

Sample ID

AB36357

Collect Date:

10/07/2008

16:00

Location ID:

61077127FLR

Loc. Descr.:

HERMAN RUSSELL

Visit ID

Collect Time::

CAS#	Analyte Name	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Date
106-46-7	p-Dichlorobenzene (1,4) Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
95-50-1	o-Dichlorobenzene (1,2) Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
99-87-6	p-Isopropyltoluene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING 10/10/08
104-51-8	n-Butylbenzene Method Reference EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS 10/9/08	RKELLING -
96-12-8	1,2-Dibromo-3-Chloropropane  Method Reference EPA5030/624/8260	2.0	Not detected	ug/L	VANDREWS 10/9/08	RKELLING
120-82-1	1,2,4-Trichlorobenzene Method Reference EPA5030/624/8260	0.50	Not detected	ug/L .	VANDREWS 10/9/08	RKELLING 10/10/08
91-20-3	Naphthalene Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	VANDREWS 10/9/08	RKELLING
87-68-3	Hexachlorobutadiene  Method Reference EPA5030/624/8260	0.50	Not detected	ug/L	. VANDREWS	RKELLING 10/10/08
87-61-6	1,2,3-Trichlorobenzene Method Reference EPA5030/624/8260	1.0	Not detected	ug/L	VANDREWS	RKELLING 10/10/08

GROUNDWATER	FIELD/LA	3 FORM	1011		Department of	North Carolina Environment and Natural Resources
ocation code_ 610	77127518	SAMPLE TYP		DIVI	SION OF WATE	ER QUALITY-GROUNDWATER SECTION
ountyRichmond		Water	~\	SAMPLE PRIORITY  Routine	. 1	188 AB36357
uad NoSe	rial No	☐ Soil		Emergency (127	~LO\ Lab	Number/ F / S - J / ·
it Lo	ng	□ Other		la '	,	e Received 10-8-08 Time: 0745
			n of Custody		Red	er: From:Bus, (ourie) Hand De
eport To: ARO, FRO MRO,	RRO, WaRO, W	iBO	- Custosy		Oth	er:
SRO, Kinston FO, Fed. Trus	st, Central Off., C	other:			Data	a Entry By: Ck:
			Purpose:		1121	e Reported,
mector(s)Bill 1 0dd	<del>`</del>	- Datelolつlost Time	e <u>약:00</u> 8	Baseline (Complaint) Complia	nce LUST P	esticide Study, Federal Trust, Other:
ELD ANALYSES			- 1		(circle one)	esticide Study, Federal Trust, Other:
1 400	Spec Cond	94at 25°C	Owner +	erman Russ	211	
mp. <sub>10</sub>	C Odor	94at 25°C	Location or Site	e lat / Imailint		20
			Sampling Moth			L.
eld Analysis			Remarks	100	O Dailer, etc	Sample Interval
:_BillTodd		<del></del>				time, air temp., etc.)
ABORATORY ANALYSE	<u> </u>				(r driping	une, air temp., etc )
BOD 310	mg/L	Diss. Solids 70300	mg/L	Ag-Silver 46566		
COD High 340 COD Low 335	mg/L	Fluoride 951	mg/L	Al-Aluminum 46557	ug/L	Organochlorine Pesticides
	mg/L	Hardness: Total 900	mg/L	As-Arsenic 46551	ug/L	Organophosphorus Pesticides
Coliform: MF Fecal 31616	/100ml	Hardness (non-carb) 902	mg/L	Ba-Barium 46558	ug/L	Nitrogen Pesticides
Coliform: MF Total 31504	/100ml	Phenois 32730	ug/l	Ca-Calcium 46552	ug/L	Acid Herbicides
TOC 680	mg/L	Specific Cond. 95	uMhos/cm	Cd-Cadmium 46559	mg/L	PCBs
Turbidity 76	NTU	Sulfate 945	mg/L	Cr-Chromium 46559	ug/L	
Residue, Suspended 530	mg/L	Sulfide 745	mg/L	Cu-Copper 46562	ug/L	
			<del></del>	Fe-Iron 46563	ug/L	
		Oil and Grease	mg/L	Hg-Mercury 71900	ug/L	. Semivolatile Organics
pH 403	units			K-Potassium 46555	ug/L	TPH-Diesel Range
Alkalinity to pH 4.5 410	mg/L			Mg-Magnesium 46554	mg/L	
Alkalinity to pH 8.3 415	mg/L			Mn-Manganese 46565	mg/L	V
Carbonate 445	mg/L	NH <sub>3</sub> as N 610	mg/L	Na-Sodium 46556	· ug/L	X Volatile Organics (VOA bottle)
Bicarbonate 440	rng/L	TKN as N 625	mg/L	Ni-Nicket	mg/L	TPH-Gasoline Range
Carbon dioxide 405	mg/L	NO2 + NO3 as N 630	mg/L	Pb-Lead 46564	ug/L	TPH-BTEX Gasoline Range
Chloride 940	mg/L	P: Total as P 665	mg/L	Se-Selenium	ug/L	
Chromium: Hex 1032	ug/L	Nitrate (NO <sub>3</sub> as N) 620	mg/L	Zn-Zinc 46567	ug/L	
Color: True 80	CÚ	Nitrite (NO <sub>2</sub> as N) 615	mg/L	211/2110 40007	ug/L	
Cyanide 720	mg/L				i	LAB USE ONLY
ab Comments						Temperature on arrival (°C):





Coleen Sullins, Director Division of Water Quality

September 8, 2008

LAT. 34.930641085

To: Owner /Resident

LONG 79. 638485490

Re: Water Sample Lab No. AB34912

As requested your well water was sampled and analyzed.

Below, please find information related to sampling conducted on the water supply well for this residence.

Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

Based on the sample results, elevated level of solvent was detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications.

DENR is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Sean Boyles, Division of Waste Management, Fayetteville Regional Office by calling (910) 433-3345.

Sincerely.





DWM 1HS

Michael F. Easley, Governor

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen Sullins, Director Division of Water Quality

September 29, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB35629

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.

[] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

NorthCarolina
Naturally

FOR.

County:

RICHMOND

River Basin

FROAP Report To

Collector:

**B\_TODD** FRO

Region:

**GROUNDWATER** 

Loc. Type:

WATER SUPPLY

Sample Matrix: Emergency Yes/No

COC Yes/No

YES. YES

Sample ID:

PO Number #

AB35629 8G1286

Date Received:

09/18/2008

Time Received: Labworks LoginID 08:00

Date Reported:

**SMATHIS** 9/23/08

Report Generated:

09/23/2008

VisitID

Loc. Descr.: WILLIAM BROWN

Location ID:

61077115FR

Collect Date:

09/17/2008

Collect Time::

13:04

Sample Depth

Sample Qualifiers and Comments

## Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations

B1-Countable membranes with <20 colonies; Estimated

B2- Counts from all filters were zero.

B3- Countable membranes with more than 60 or 80 colonies; Estimated

B4-Filters have counts of both >60 or 80 and < 20; Estimated

B5-Too many colonies were present; too numerous to count (TNTC)

J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated

J3-The sample matrix interfered with the ability to make any accurate determination; Estimated

J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

N3-Estimated concentration is < PQL and >MDL

NE-No established PQL

P-Elevated PQL due to matrix interference and/or sample dilution

Q1-Holding time exceeded prior to receipt at lab.

Q2- Holding time exceeded following receipt by lab

PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity

U- Samples analyzed for this compound but not detected

X1- Sample not analyzed for this compound

Sample ID

AB35629

Collect Date:

09/17/2008

Collect Time::

13:04

Location ID:

61077115FR

WILLIAM BROWN Loc. Descr.: Visit ID

CAS#	Analyte Na	me	PQL	Result Qu	ialifier Units	i	Analyst/Date	Approved By /Date
	Sample temperature at re	celpt by lab		1.6		•c	HPARKER	SMATHIS
	Method Reference						9/18/08	9/18/08
OL		· · · · · · · · · · · · · · · · · · ·						
	Volatile Organics in liquid			_TITLE_		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				Ū	9/18/08	9/23/08
75-78-1	Dichlorodifluoromethane		1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-6-	9/18/08	9/23/08
74-87-3	Chloromethane		0.50	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-0-	9/18/08	9/23/08
75-01-4	Vlnyl Chloride	<del></del>	0.50	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-6-	9/18/08	9/23/08
74-83-9	Bromomethane	·	0,50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		*****			9/18/08	9/23/08
75-00-3	Chloroethane		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				ug L	9/18/08	9/23/08
75-69-4	Trichlorofluoromethane		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	5.55	1101 4010000		Ogr	9/18/08	9/23/08
75-35-4	1,1-Dichloroethene		0.25	Not detected	··	ug/L		
	Method Reference	EPA5030/624/8260	0.20	Not detected		ug/L	VANDREWS 9/18/08	RKELLING 9/23/08
75-09-2	Methylene Chloride		10	Not detected		ua/l		
	Method Reference	EPA5030/624/8260		Hot detected		ug/L	VANDREWS 9/18/08	RKELLING
156-60-5	trans-1,2-Dichloroethene		0.25	Not detected	· · · · · ·			9/23/08
	Method Reference	EPA5030/624/8260	0.23	. Not detected		ug/L	VANDREWS 9/18/08	RKELLING
1634-04-4	Methyl Tert-Butyl Ether		0.25	Not dot act ad	<del></del>			9/23/08
1001011	Method Reference	EPA5030/624/8260	0.25	Not detected	•	ug/L	VANDREWS	RKELLING
75-34-3	1,1-Dichloroethane		0.25	Nat data at			9/18/08	9/23/08
70-04-0	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
156-59-4	ds-1,2-Dichlomethene		0.05	Africa de la companya	<del></del>	<del></del>	9/18/08	9/23/08
150-55-4	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
74-97-5	Bromochloromethane	E1 73030/024/0280	0.05				9/18/08	9/23/08
14-31-5	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
67-66-3		L1 M3030/024/8200			•		9/18/08	9/23/08
. 07-00-3		EDASO20/624/9260	0.25	Not detected		ug/L	VANDREWS	RKELLING
500.00.7	Method Reference	EPAS030/624/8260					9/18/08	9/23/08
590-20-7	2,2-Dichloropropane	EDA6030/634/0363	0.25	Not detected		ug/L	VANDREWS	RKELLING
107-06-2	Method Reference	EPAS030/624/8260					9/18/08	9/23/08
107-00-2	,	EDA5020/C24/B2C0	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08

Sample ID

AB35629

Collect Date: Collect Time:: 09/17/2008

13:04

Location ID: Loc. Descr.: 61077115FR

WILLIAM BROWN

Visit ID

CAS#	Analyte Na	me	PQL	Result (	lualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		•		_	9/18/08	9/23/08
563-58-6	1,1-Dichloropropene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
56-23-5	Carbon Tetrachloride	<del></del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
71-43-2	Benzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				_	9/18/08	9/23/08
74-95-3	Dibromomethane	··	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•		9/18/08	9/23/08
78-87-5	1,2-Dichloropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
79-01-6	Trichloroethene		0.25	1.2		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	•	9/18/08	9/23/08
75-27-4	Bromodichloromethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
10061-01-5	cis-1,3-Dichloropropene		0.25	Not detected		ug/L	VANDREWS	RKELLING
_	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
10061-02-6	trans-1,3-Dichloropropen	9	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
79-00-5	1,1,2-Trichloroethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
108-88-3	Toluene		0.25	Not detected		ug/L	VANDREWS	RKELLING
_	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
142-28-9	1,3-Dichloropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	_				9/18/08	9/23/08
124-48-1	Dibromochloromethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
106-93-4	(EDB)1,2-Dibromoethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
127-18-4	Tetrachloroethene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
108-90-7	Chlorobenzene		0.25	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
100-41-4	Ethylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08

Sample ID Collect Date:

AB35629 09/17/2008

13:04

Loc. Descr.: Visit ID

Location ID:

WILLIAM BROWN

61077115FR

	Collect T

Collect	Time::

CAS#	Analyte Na	me	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
75-25-2	Bromoform		1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
108-38-3	m,p-Xylene		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
100-42-5	Styrene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
79-34-5	1,1,2,2-Tetrachloroethane		0.25	Not detected	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
630-20-6	1,1,1,2-Tetrachloroethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
95-47-6	o-Xylene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
96-18-4	1,2,3-Trichloropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
98-82-8	Isopropylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
108-86-1	Bromobenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	<u>.</u>				9/18/08	9/23/08
103-65-1	n-Propylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
95-49-8	2-Chlorotoluene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
106-43-4	4-Chlorotoluene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		<u> </u>			9/18/08	9/23/08
108-67-8	1,3,5-Trimethylbenzene	==.=	0.25	Not detected		ug/L	VANDREWS	RKELLING
00.00.0	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
98-06-6	tert-Butylbenzene	5545000000000	0.25	Not detected		ug/L	VANDREWS	RKELLING
05.00.0	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
95-63-6	1,2,4-Trimethylbenzene	EDA 5000 100 4 10000	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
135-98-8	sec-Butylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
548 33 1	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
543-73-1	m-Dichlorobenzene (1,3)	<b>FD4F444</b>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
106-46-7	p-Dichlorobenzene (1,4)		0.25	Not detected		ug/L	VANDREWS	RKELLING
	. Method Reference	EPA5030/624/8260					9/18/08	9/23/08

1.0

Sample ID

Collect Date:

Collect Time::

9/18/08

9/18/08

VANDREWS

ug/L

AB35629

09/17/2008

13:04

9/23/08

9/23/08

RKELLING

Location ID: Loc. Descr.: 61077115FR

87-61-6

WILLIAM BROWN

Method Reference

1,2,3-Trichlorobenzene

Method Reference

EPA5030/624/8260

EPA5030/624/8260

Visi: ID

CAS# Analyte Name PQL Result Qualifier Units Analyst/Date Approved By /Date 95-50-1 o-Dichlorobenzene (1,2) 0.25 Not detected ug/L VANDREWS RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 99-87-6 p-Isopropyttoluene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 104-51-8 n-Butylbenzene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 96-12-8 1,2-Dibromo-3-Chloropropane 2.0 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 1,2,4-Trichlorobenzene 0.50 Not detected ug/L VANDREWS RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 91-20-3 Naphthalene 0.50 Not detected ug/L VANDREWS RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 87-68-3 Hexachlorobutadiene 0.50 Not detected ug/L **VANDREWS** RKELLING

Not detected

County_Richmond	GROUNDWATER	FIELD/LA	B FORM		M			Departm	ent of E	North Carolina Environment and Natural Resources
County_Richmond Qual No Senial No Other Control Contro	Location code 610	77.115 FR		SAMPLE TY		SAN	ADI E BDIODITY	DIVISION OF	WATE	R QUALITY-GROUNDWATER SECTION
Content   Cont	CountyRichmond			Water		П	Routine		l ah i	Number 435629
Report To: ARO, FRO MRO, WRO, WRO, WRO, WSRO, Kinston FO, Fed. Trust, Central Off., Other:   Data Entry By: Ck;   Data Entry By: Data Entry	Quad No Se	uad No Serial No at Long					Emergency	(IISFR)	Date	Received 9/18/08 Time: 0.999
Description of Sampling point	WSRO, Kinston FO, Fed. Trus Shipped by: Bus. Courier Han	st, Central Off., ad Del., Other:_	Other:		Purpose	e: Base	eline, (omplaint,	Compliance, LUS	Data Date	er:Ck:Ck: a Entry By:Ck: e Reported:
BOD 310	pH 400 Temp.10 ° Appearance Field Analysis By:BillTodd	_ Spec. Cond C Odor		•	Owner Location or S	Site_	lliam	Brow Fruitlan outside pump	n d !tre	Road tap Sample Interval
COD High 340   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46551   ug/L   Hardness: Total 900   mg/L   Ca-Cadrum 46552   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46552   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46559   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46559   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46559   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46559   ug/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Hardness: Total 900   mg/L   Ca-Cadrum 46559   ug/L   Hardness: Total 900   mg/L   Hardness: Total 950   ug/L   Hardness: Total 950   ug/L   Hardness: Total 950   ug/L   Hardness: Total 950   ug/L   Hardness: Total 950   ug	BOD 310		Diss. Solids	70300	mg/L	) (	Ag-Silver 46566			
COD Low 335	COD High 340	mg/L	Fluoride 95	1		┪├──	<del></del>	, —————————	— I	
Coliform: MF Tecal 31616	COD Low 335	mg/L	Hardness:	Total 900		1 -	<del></del>	<u>_</u>		
Coliforn: MF Total 31504	Coliform: MF Fecal 31616	/100ml	Hardness (	non-carb) 902		<b> </b>	<del></del>			
Tot Geb	Coliform: MF Total 31504	/100ml				╽├─	<del> </del>			
Turbidity 76	TOC 680	mg/L	Specific Co	nd. 95			<del></del>	`		PCBs.
Residue, Suspended 530   mg/L   Sulfide 745   mg/L   Cu-Copper 46562   ug/L   Semivolatile Organics   TPH-Diesel Range   TPH-	Turbidity 76	UTN	Sulfate 945			l	<del></del>	<u> </u>		
Fe-Iron 46563	Residue, Suspended 530	mg/L	Sulfide 745			l		u	<del>-</del>	
Dil and Grease   mg/L   Hg-Mercury 71900   ug/L   TPH-Diesef Range					mg/L	<b>∤</b>	<del></del>	u	g/L	
PH 403			Oil and Gre	ase	ma/l		<del> </del>	u	9/L	Semivolatile Organics
Alkalinity to pH 4 5 410       mg/L         Alkalinity to pH 8.3 415       mg/L         Carbonate 445       mg/L         Bicarbonate 440       mg/L         Carbon dioxide 405       mg/L         Chloride 940       mg/L         Chromium: Hex 1032       ug/L         Color: True 80       CU         Cyanide 720       mg/L     Mg-Magnesium 46554 mg/L  Mn-Manganese 46565 ug/L  Na-Sodium 46556 mg/L  Ni-Nickel ug/L  Pb-Lead 46564 ug/L  Se-Selenium ug/L  Zn-Zinc 46567 ug/L  LAB USE ONLY Temperature on arrival (PC): Log	pH 403	units					<del> </del>		g/L	TPH-Diesel Range
Alkalinity to pH 8.3 415   mg/L	Alkalinity to pH 4 5 410	mg/L			<del></del>	<del>                                   </del>	<del></del>		ig/L	
Carbonate 445   mg/L   NH3 as N 610   mg/L     Bicarbonate 440   mg/L     Carbon dioxide 405   mg/L     Chloride 940   mg/L     Chromium: Hex 1032   ug/L     Color: True 80   Cu   Nitrate (NO2 as N) 615   mg/L     Cyanide 720   mg/L     NH3 as N 610     NH3 as N 610   mg/L     NH3 as N 610     NH3 as N	Alkalinity to pH 8.3 415	mg/L				<del> </del>			<del></del>	
Bicarbonate 440   mg/L   TKN as N 625   mg/L   Ni-Nickel   ug/L   TPH-Gasoline Range   TPH-BTEX Gasoline Range   TPH-BTE	Carbonate 445	mg/L	NH <sub>1</sub> as N 6	10	ma/l		<del></del>	000 uc	g/L	X Volatile Organics (VOA bottle)
Carbon dioxide 405   mg/L   NO2 + NO3 as N 630   mg/L   Pb-Lead 46564   ug/L   TPH-BTEX Gasoline Range	Bicarbonate 440					 		m		TPH-Gasoline Range
Chloride 940   mg/L   P: Total as P 665   mg/L   Se-Selenium   ug/L   Zn-Zinc 46567   ug/	Carbon dioxide 405		<del></del>		· - ·			u	g/L	TPH-BTEX Gasoline Range
Chromium: Hex 1032	Chloride 940								2/L	
Color: True 80	Chromium: Hex 1032					<del> </del>		ug	3/L	
Cyanide 720 mg/L LAB USE ONLY Temperature on arrival (°C)	Color: True 80	<del></del>				<del> </del>	ZII-ZINC 4656/	u		
1 lemperature on arrival (°C) · 1 / a	Cyanide 720		1	45 117 013	mg/L	<b> </b>	<u> </u>			
		{				L			[]	remperature on arrival (°C):
				- <del></del>						
GW-54 REV. 7/03 For Dissolved Analysis, submit filtered comple continue to the complete continue to the complete continue to the complete continue to the cont					· · · · ·					



Michael F. Easley, Governor

William G. Ross Jr., Secretary North Carolina Department of Environment and Natural Resources

> Coleen Sullins, Director Division of Water Quality

September 29, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB35625

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

- Based on the sample results, your water is safe for all uses. It is recommended that the water be tested every six months to make sure it is still safe.
- [] Based on the sample results, elevated levels of the pesticides were detected. It is recommended that the water should not be used for cooking or drinking. Also, it is recommended that showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

orthCarolina

County: River Basin RICHMOND

Report To

FROAP

Collector:

**B TODD** <u>FRO</u>

Region:

Sample Matrix:

Loc. Type:

**GROUNDWATER** WATER SUPPLY

Emergency Yes/No

YES

COC Yes/No

YES.

Sample ID:

PO Number #

AB35625 8G1282 09/18/2008

Date Received: Time Received:

08:00

Labworks Login1D Date Reported:

**SMATHIS** 9/23/08

Report Generated:

09/23/2008

VisitID

Loc. Descr.: ANNA HARRISON

Location ID:

61077961NC177

Collect Date:

09/17/2008

Collect Time::

13:16

Sample Depth

Sample Qualifiers and Comments

## Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations

B1-Countable membranes with <20 colonies; Estimated

B2- Counts from all filters were zero.

B3- Countable membranes with more than 60 or 80 colonies; Estimated

B4-Filters have counts of both >60 or 80 and < 20; Estimated

B5-Too many colonies were present; too numerous to count (TNTC)

J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated

J3-The sample matrix interfered with the ability to make any accurate determination; Estimated

J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

N3-Estimated concentration is < PQL and >MDL

NE-No established PQL

P-Elevated PQL due to matrix interference and/or sample dilution

Q1-Holding time exceeded prior to receipt at lab.

Q2- Holding time exceeded following receipt by lab

PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity

U- Samples analyzed for this compound but not detected

X1- Sample not analyzed for this compound

Sample ID

AB35625

Collect Date:

09/17/2008

Collect Time::

13:16

Location ID:

6I077961NC177

Loc. Descr.: Visit ID

ANNA HARRISON

CAS	# Analyte Na	ime	PQL	Result Q	lualifier	Units	Analyst/Date	Approved By /Date
	Sample temperature at re	ecelpt by lab	· · · · · · · · · · · · · · · · · · ·	1.6		*c	HPARKER	SMATHIS
	Method Reference					_	9/18/08	. 9/18/08
OL								. 5710700
	Volatile Organics in liquid			_TITLE_		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		_			9/18/08	9/23/08
75-78-1	Dichlorodifluoromethane	<del></del>	1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				- <b>3-</b>	9/18/08	9/23/08
74-87-3	Chloromethane		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-8-	9/18/08	9/23/08
75-01-4	Vinyl Chloride		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				ug/L	9/18/08	9/23/08
74-83-9	Bromomethane		0.50	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				092	9/18/08	RKELLING 9/23/08
75-00-3	Chloroethane		0.50	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				cg/L	9/18/08	RKELLING 9/23/08
75-69-4	Trichlorofluoromethane		0.50	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260		***************************************		ug/L	9/18/08	RKELLING 9/23/08
75-35-4	1,1-Dichloroethene		0.25	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				Ug/L	9/18/08	RKELLING 9/23/08
75-09-2	Methylene Chloride		10	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				ug/L	9/18/08	RKELLING 9/23/08
156-60-5	trans-1,2-Dichloroethene		0.25	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				ug/L	9/18/08	RKELLING
1634-04-4	Methyl Tert-Butyl Ether		0.25	Not detected	<del></del>	ug/l		9/23/08
	Method Reference	EPA5030/624/8260	3.23	not delected		ug/L	VANDREWS 9/18/08	RKELLING
75-34-3	1,1-Dichloroethane	<del></del>	0.25	Not detected		· · · · ·		9/23/08
	Method Reference	EPA5030/624/8260 .		,101 0010000		ug/L	VANDREWS 9/18/08	RKELLING
156-59-4	ds-1,2-Dichloroethene		0.25	Not detected		1100		9/23/08
	Method Reference	EPA5030/624/8260	0.20	Hot detected		ug/L	VANDREWS	RKELLING
74-97-5	Bromochloromethane		0.25	Not detected		#	9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.20	Not detected		ug/L	VANDREWS	RKELLING
67-66-3	Chloroform		0.25	Not detected			9/18/08	9/23/08
•	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	VANDREWS	RKELLING
590-20-7	2,2-Dichloropropane		0.25	Not detected	<del></del>	<del></del>	9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.23	Not detected		ug/L	VANDREWS	RKELLING
107-06-2	1,2-Dichloroethane		0.25	Manager			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING
<del></del>	- Total Marie Control	_: 7.0000/02/70200					9/18/08	9/23/08

Sample ID

AB35625

Collect Date: Collect Time:: 09/17/2008

13:16

Loc. Descr.: 61077961NC177

Loc. Descr.: ANNA HARRISON

Visit ID

CAS# **Analyte Name** PQL Result Qualifier Units Analyst/Date Approved By /Date 71-55-6 1,1,1-Trichloroethane 0.25 Not detected ug/L **VANDREWS** RKELLING EPA5030/624/8260 Method Reference 9/18/08 9/23/08 563-58-6 1,1-Dichloropropene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 Carbon Tetrachloride 0.25 Not detected ug/L **VANDREWS RKELLING** Method Reference EPA5030/624/8260 9/18/08 9/23/08 71-43-2 Benzene Not detected 0.25 ug/L VANDREWS RKELLING EPA5030/624/8260 Method Reference 9/18/08 9/23/08 74-95-3 Dibromomethane 1.0 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 78-87-5 1,2-Dichloropropane 0.25 Not detected ug/L VANDREWS RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 79-01-6 Trichloroethene 0.25 0.12 N3 ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 75-27-4 Bromodichloromethane 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 10061-01-5 ds-1,3-Dichloropropene 0.25 Not detected ug/L VANDREWS RKELLING EPA5030/624/8260 Method Reference 9/18/08 9/23/08 10061-02-6 trans-1,3-Dichloropropene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 79-00-5 1,1,2-Trichloroethane 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 108-88-3 Toluene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 142-28-9 1,3-Dichloropropane 0.25 Not detected ug/L **VANDREWS** RKELLING EPA5030/624/8260 Method Reference 9/18/08 9/23/08 124-48-1 Dibromochloromethane 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 106-93-4 (EDB)1,2-Dibromoethane 0.25 Not detected ug/L **VANDREWS** RKELLING EPA5030/624/8260 Method Reference 9/18/08 9/23/08 127-18-4 Tetrachloroethene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 108-90-7 Chlorobenzene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08 100-41-4 Ethylbenzene 0.25 Not detected ug/L **VANDREWS** RKELLING Method Reference EPA5030/624/8260 9/18/08 9/23/08

Sample ID

Collect Date:

Collect Time::

AB35625

09/17/2008 13:16

Location ID:

61077961NC177

**ANNA HARRISON** 

Method Reference

Method Reference

m-Dichlorobenzene (1,3)

Method Reference

p-Dichlorobenzene (1,4)

Method Reference

sec-Butylbenzene

135-98-8

543-73-1

106-46-7

EPA5030/624/8260

EPA5030/624/8260

EPA5030/624/8260

EPA5030/624/8260

Loc. Descr.: Visit ID

Γ	CAS#	Analyte Na	me	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date	
L	75-25-2	Bromoform		1.0	Not detected		ug/L	VANDREWS		
		Method Reference	EPA5030/624/8260	•			Og/L	9/18/08	RKELLING	
	108-38-3	m,p-Xylene		0,50	Not detected				9/23/08	
		Method Reference	EPA5030/624/8260	0.50	Mot detected		ug/L	VANDREWS	RKELLING	
	100-42-5	Styrene	· · · · · · · · · · · · · · · · · · ·	0,25	Not detected	· ·		9/18/08	9/23/08	
		Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING	
	79-34-5	1,1,2,2-Tetrachloroethane		0.05				9/18/08	9/23/08	
	10.04.0	Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING	<del></del>
	630-20-6	1,1,1,2-Tetrachloroethane						9/18/08	9/23/08	
	030-20-0			0.25	Not detected		ug/L	VANDREWS	RKELLING	
	06.47.6	Method Reference	EPA5030/624/8260	<u>.</u>				9/18/08	9/23/08	
	95-47-6	o-Xylene		0.25	Not detected		ug/L	VANDREWS	RKELLING	
		Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08	
	96-18-4	1,2,3-Trichloropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING	
		Method Reference	EPA5030/624/8260			,		9/18/08	9/23/08	
	98-82-8	Isopropylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING	
		Method Reference	EPA5030/624/8260					9/18/08	9/23/08	
	108-86-1	Bromobenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING	
		Method Reference	EPA5030/624/8260				_	9/18/08	9/23/08	
	103-65-1	n-Propylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING	
		Method Reference	EPA5030/624/8260				- <b>&amp;</b> -	9/18/08	9/23/08	
	95-49-8	2-Chlorotoluene	<del></del> _	0.25	Not detected		ug/L	VANDREWS		
		Method Reference	EPA5030/624/8260				29.2	9/18/08	RKELLING	
	106-43-4	4-Chiorotoluene		0.25	Not detected	<del></del>	ug/L		9/23/08	
		Method Reference	EPA5030/624/8260		1101 00100220		ug/L	VANDREWS	RKELLING	
	108-67-8	1,3,5-Trimethylbenzene		0.25	Not detected			9/18/08	9/23/08	
		Method Reference	EPA5030/624/8260	0.20	140t detected		ug/L	VANDREWS	RKELLING	
	98-06-6	tert-Butylbenzene		0.25	Not does to			9/18/08	9/23/08	
		Method Reference	EPA5030/624/8260	0.25	Not detected		ug/L	VANDREWS	RKELLING	<del></del>
	95-63-6	1,2,4-Trimethylbenzene						9/18/08	9/23/08	
	33-03-0	Mothod Reference	EDAE030/634/9360	0.25	Not detected		ug/L	VANDREWS	RKELLING	

Not detected

Not detected

0.26

0.25

0.25

0.25

VANDREWS

VANDREWS

VANDREWS

9/18/08

9/18/08

9/18/08

9/18/08

ug/L

ug/L

ug/L

RKELLING

RKELLING

RKELLING

9/23/08

9/23/08

9/23/08

9/23/08

Sample ID

AB35625

09/17/2008

13:16

Collect Date:

Lécation ID: Loc. Descr.:

6I077961NC177

Visit ID

**ANNA HARRISON** 

Collect Time::

CAS#	Analyte N	ame	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
95-50-1	o-Dichlorobenzene (1,2)		0.25	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260				ugr L		RKELLING
99-87-6	p-Isopropyttoluene		0.25	Mak days at a			9/18/08	9/23/08
	Method Reference	EPA5030/624/8260	0.25	Not detected	•	ug/L	VANDREWS	RKELLING
104-51-8	<del></del>	2173030702478200					9/18/08	9/23/08
104-51-6	n-Butylbenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
96-12-8	1,2-Dibromo-3-Chloropro	pane	2.0	Not detected		ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260	•			- <b>g-</b>	9/18/08	RKELLING
120-82-1	1,2,4-Trichlorobenzene		0.50	Not detected		0		9/23/08
	Method Reference	EPA5030/624/8260	0.00	Not detected		ug/L	VANDREWS	RKELLING
91-20-3	Naphthalene						9/18/08	9/23/08
01-20-0	•	FD45000404	0.50	0.32	N3	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
87-68-3	Hexachlorobutadiene		0.50	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	*				9/18/08	9/23/08
87-61-6	1,2,3-Trichlorobenzene		1.0	Not detected		tia/l		
	Method Reference	EPA5030/624/8260				ug/L	VANDREWS 9/18/08	RKELLING

GROUNDWATER	FIELD/LA	B FORM				Danada		North Carolina	861282
Location code610			SAMPLE TY			DIVISION OF	WATER O	rironment and Natural Res	sources ER SECTION
CountyRichmond_			Water		SAMPLE PRIORITY  Routine			A	225125
Quad NoS	erial No		☐ Soil		Emergency	(961 NC177)		mber	B35625
Lat Lo	ong.		Other		- Lineigency	Mother	Date R	eceived 9/18/08	_Time: 0800
_			□ Ch:	ain of Custody			Rec'd E Other:_	By: HP From:	Bus Couried, Hand De
Report To: ARO, FRO MRO,	RRO, WaRO, W	ViRO,				1			
WSRO, Kinston FO, Fed. Tru	st, Central Off., (	Other:	·	<del></del>			Data E	ntry By:eported:	Ck:
Shipped by: Bus, Courier Ha Collector(s):BillTodd	na vel Other			Purpose	:				
		– Date 09	17/08 1in	ne <u>1'.16</u>	Baseline, Complain	t) Compliance, LUI	ST, Pestic	cide Study, Federal Tru	ıst, Other:
FIELD ANALYSES	_	· ·	•	Owner A	inna Ha Site 961 of sampling point	rrican			-
pH 400	Spec. Cond	.94	at 25°C	Location or S	ite961	N HWILL	77		
Appearance	C Odor			<ul><li>Description of</li></ul>	of sampling point	outside	TUR	)	
ield Analysis				_ Sampling Me	thodCov	pump		Sample Inten	val
3y:BillTodd		•		Remarks	COV	HYOUTHO. Daller, etc	124	•	
ABORATORY ANALYSE	<u>S</u>		<del></del>			(F	umping time,	air temp., etc.)	
BOD 310	mg/L	Diss. Solids	70300	mg/L	Ag-Silver 46566			<del></del>	
COD High 340	mg/L	Fluoride 95		mg/L	Al-Aluminum 465		g/L	Organochlorine Pesticides	<del></del>
COD Low 335	mg/L	Hardness: 1	otal 900	mg/L	As-Arsenic 46551	<u> </u>	g/L	Organophosphorus Pestici	des
Coliform: MF Fecal 31616	/100ml	Hardness (r	on-carb) 902	mg/L	Ba-Barium 46558	u	g/L	Nitrogen Pesticides	
Coliform: MF Total 31504	/100ml	Phenois 327		ug/l	Ca-Calcium 4655	u	g/L	Acid Herbicides	
TOC 680	mg/L	Specific Cor	nd. 95	uMhos/cm	Cd-Cadmium 465	II	ng/L	PCBs	
Turbidity 76	NTU	Sulfate 945	<u> </u>	mg/L	Cr-Chromium 465	u	9/L	<u> </u>	
Residue, Suspended 530	mg/L	Sulfide 745		mg/L	Cu-Copper 46562	u	9/L		
					Fe-Iron 46563		g/L		
		Oil and Grea	ise	mg/L	Hg-Mercury 71900	· ————	9/L	Semivolatile Organics	
pH 403	units				K-Potassium 4655	u	9/L	TPH-Diesel Range	<del>-</del>
Alkalinity to pH 4.5 410	mg/L				Mg-Magnesium 46	554	ig/L	·	
Alkalinity to pH 8.3 415	mg/L				Mn-Manganese 46	11:	19/L X		
Carbonate 445	mg/L	NH <sub>3</sub> as N 61	0	mg/L	Na-Sodium 46556	u		Volatile Organics (VOA bot	tle)
Bicarbonate 440	mg/L	TKN as N 62		mg/L	Ni-Nickel	m	g/L	TPH-Gasoline Range	
Carbon dioxide 405	mg/L	NO <sub>2</sub> + NO <sub>3</sub> a		mg/L	Pb-Lead 46564		2/L	TPH-BTEX Gasoline Range	<u>e</u>
Chloride 940	mg/L	P: Total as F	665	mg/L	Se-Selenium		<u></u>	<del></del>	
Chromium: Hex 1032	ug/L	Nitrate (NO <sub>3</sub>	as N) 620	mg/L	Zn-Zinc 46567		1/L	<del></del>	
Color: True 80	cú	Nitrite (NO <sub>2</sub>	is N) 615	mg/L			2/L     1 A G	USE ONLY	
Cyanide 720	mg/L			<del></del>	<del> </del>		Ten	nperature on arrival (°C):	1.6
Lab Comments					<u> </u>				1,0

Coleen Sullins, Director Division of Water Quality





September 29, 2008

To: Owner /Resident

Re: Water Sample Lab No. AB35629

Recently, it has been discovered that some water supply wells in your area contain detectable amounts of pesticides and associated chemicals that were in use more than 25 years ago when this area was primarily agricultural land.

Below, please find information related to sampling conducted on the water supply well for this residence.

[]	Based on the sample results, your water is safe for all uses.	It is recommended that the water b	E
	tested every six months to make sure it is still safe.		

[]	Based on the sample results, elevated levels of the pesticides were detected. It is recommended
	that the water should not be used for cooking or drinking. Also, it is recommended that
	showering and bathing should be limited to less than 10 minutes.

The above usage guidelines were provided by Dr. Ken Rudo, toxicologist with the North Carolina Division of Public Health. If you have further questions about the usage recommendations, Dr. Rudo can be reached at (919) 707-5911 or through the division's main number at (919) 707-5900.

This well was sampled by the North Carolina Division of Water Quality. Samples of water were collected and analyzed for chemicals known as volatile organics. Volatile organics are manmade chemicals and are used in many applications, including pesticides. Although the chemicals detected in some of the wells in this area are no longer being used in pesticides, they can remain in the groundwater for long periods of time.

The Division of Water Quality is committed to providing you with additional information, as may be needed. If you have questions about the investigation of this issue, you may contact Stephen Barnhardt, Aquifer Protection Section Supervisor for the Fayetteville Regional Office by calling (910) 433-3336.

Sincerely,

Stephen A. Barnhardt

North Carolina

County:

RICHMOND

River Basin

Report To

FROAP

Collector: Region:

B TODD <u>FRO</u>

Sample Matrix:

GROUNDWATER

Loc. Type:

WATER SUPPLY

Emergency Yes/No

YES

COC Yes/No

**YES** 

Sample ID:

PO Number #

AB35629 8G1286

Date Received:

09/18/2008

Time Received:

08:00 **SMATHIS** 

Date Reported:

9/23/08

Report Generated:

Labworks LoginID

09/23/2008

VisitID

Loc. Descr.: WILLIAM BROWN

Location ID:	61077115FR	Collect Date:	09/17/2008	Collect Time::	13:04	Sample Depth
	<del></del>					<del></del>

## Sample Qualifiers and Comments

### Routine Qualifiers

For a more detailed description of these qualifier codes refer to www.dwqlab.org under Staff Access

A-Value reported is the average of two or more determinations

B1-Countable membranes with <20 colonies; Estimated

B2- Counts from all filters were zero.

B3- Countable membranes with more than 60 or 80 colonies; Estimated

B4-Filters have counts of both >60 or 80 and < 20; Estimated

B5-Too many colonies were present; too numerous to count (TNTC)

J2- Reported value failed to meet QC criteria for either precision or accuracy; Estimated

J3-The sample matrix interfered with the ability to make any accurate determination; Estimated

J6-The lab analysis was from an unpreserved or improperly chemically preserved sample; Estimated

N1-The component has been tentatively identified based on mass spectral library search and has an estimated value

N3-Estimated concentration is < PQL and >MDL

NE-No established PQL

P-Elevated PQL due to matrix interference and/or sample dilution

Q1-Holding time exceeded prior to receipt at lab.

Q2- Holding time exceeded following receipt by lab

PQL- Practical Quantitation Limit-subject to change due to instrument sensitivity

U- Samples analyzed for this compound but not detected

X1- Sample not analyzed for this compound

61077115FR

Loc. Descr.:

Location ID:

Visit ID

WILLIAM BROWN

Sample ID

AB35629

Collect Date:

09/17/2008

Collect Time::

13:04

75-78-1	Sample temperature at rec Method Reference  Volatile Organics in liquid Method Reference  Dichlorodifluoromethane Method Reference  Chloromethane Method Reference	EPA5030/624/8260	1.0	1.6 _TITLE_	*C ug/L	HPÄRKER 9/18/08 VANDREWS	SMATHIS 9/18/08 RKELLING
75-78-1	Volatile Organics in liquid Method Reference Dichlorodifluoromethane Method Reference Chloromethane Method Reference		1.0		ug/L	VANDREWS	· · · · · · · · · · · · · · · · · · ·
75-78-1	Method Reference  Dichlorodifluoromethane Method Reference  Chloromethane Method Reference		1.0		ug/L		RKELLING
75-78-1	Method Reference  Dichlorodifluoromethane Method Reference  Chloromethane Method Reference		1.0		ug/L		RKELLING
	Dichlorodifluoromethane Method Reference Chloromethane Method Reference		1.0				
	Method Reference Chloromethane Method Reference	EPA5030/624/8260	1.0	NI-A dea		9/18/08	9/23/08
74-87-3	Chloromethane Method Reference	EPA5030/624/8260		Not detected	ug/L	VANDREWS	RKELLING
74-87-3	Method Reference					9/18/08	9/23/08
			0.50	Not detected	ug/L	VANDREWS	RKELLING
		EPA5030/624/8260				9/18/08	9/23/08
75-01-4	Vinyl Chloride		0.50	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08
74-83-9	Bromomethane		0.50	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	·		-8-2	9/18/08	9/23/08
75-00-3	Chloroethane		0.50	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-9r	9/18/08	9/23/08
75-69-4	Trichlorofluoromethane		0.50	Not detected	ug/L	VANDREWS	
	Method Reference	EPA5030/624/8260	0.00	not detected	uyr	9/18/08	RKELLING
75-35-4	1,1-Dichloroethene		0.25	Net delicated			9/23/08
, 0 00 4	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING
75-09-2	Methylene Chloride			Al-A-d		9/18/08	9/23/08
75-03-2	Method Reference	EPA5030/624/8260	10	Not detected	ug/L	VANDREWS	RKELLING
450.00.5		EPA3030/024/0200				9/18/08	9/23/08
156-60-5	trans-1,2-Dichloroethene		0.25	Not detected	· ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
1634-04-4	Methyl Tert-Butyl Ether		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
75-34-3	1,1-Dichloroethane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
156-59-4	ds-1,2-Dichloroethene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			_	9/18/08	9/23/08
74-97-5	Bromochloromethane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
67-66-3	Chloroform		0.25	Not detected	ug/L	VANDREWS	RKELLING
,	Method Reference	EPA5030/624/8260			-9-	9/18/08	9/23/08
590-20-7	2,2-Dichloropropane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			ug/ L	9/18/08	9/23/08
107-06-2	1,2-Dichloroethane		0.25	Not detected	ug/L		
	Method Reference	EPA5030/624/8260	0.20	1101 00100100	ugyc	VANDREWS 9/18/08	RKELLING 9/23/08

Sample ID

AB35629

Collect Date:
Collect Time::

09/17/2008

13:04

Cocation ID: Loc. Descr.: 61077115FR

WILLIAM BROWN

Visit ID

CAS#	Analyte Na	ime	PQL	Result	Qualifier	Units	Analyst/Date	Approved By /Date
71-55-6	1,1,1-Trichloroethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260		•		-	9/18/08	9/23/08
563-58-6	1,1-Dichloropropene	··· <u> </u>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
56-23-5	Carbon Tetrachloride	<del></del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
71-43-2	Benzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
74-95-3	Dibromomethane		1.0	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	- <b>3-</b>	9/18/08	9/23/08
78-87-5	1,2-Dichioropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				- <b>g-</b>	9/18/08	9/23/08
79-01-6	Trichloroethene	· · · · · · · · · · · · · · · · · · ·	0.25	1.2	<del></del>	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	- <b>g-</b>	9/18/08	9/23/08
75-27-4	Bromodichloromethane		0.25	Not detected		ug/L	VANDREWS	RKELLING .
	Method Reference	EPA5030/624/8260				-9-	9/18/08	9/23/08
10061-01-5	ds-1,3-Dichloropropene	<del> </del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
10061-02-6	trans-1,3-Dichloropropen	e	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
79-00-5	1,1,2-Trichloroethane		0.25	Not detected	·	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
108-88-3	Toluene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
142-28-9	1,3-Dichloropropane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				,	9/18/08	9/23/08
124-48-1	Dibromochioromethane		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				•	9/18/08	9/23/08
106-93-4	(EDB)1,2-Dibromoethane	9	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260					9/18/08	9/23/08
127-18-4	Tetrachloroethene	· ·	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
108-90-7	Chlorobenzene		0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				-	9/18/08	9/23/08
100-41-4	Ethylbenzene	<del>·</del>	0.25	Not detected		ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				<b>-</b>	9/18/08	9/23/08

Sample ID Collect Date: Collect Time:: AB35629

09/17/2008

13:04

Location ID:

61077115FR

Loc. Descr.:

WILLIAM BROWN

Visit ID

CAS#	Analyte Nar	ne	PQL	Result Qualifier	Units A	nalyst/Date	Approved By /Date
75-25-2	Bromoform	· · · · · · · · · · · · · · · · · · ·	1.0	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
108-38-3	m,p-Xylene		0.50	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
100-42-5	Styrene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
79-34-5	1,1,2,2-Tetrachloroethane	30. ·	0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
630-20-6	1,1,1,2-Tetrachloroethane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			, -	9/18/08	9/23/08
95-47-6	o-Xylene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08
96-18-4	1,2,3-Trichloropropane		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
98-82-8	Isopropylbenzene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08
108-86-1	Bromobenzene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260	,		J	9/18/08	9/23/08
103-65-1	n-Propylbenzene	<del></del>	0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
95-49-8	2-Chlorotoluene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
106-43-4	4-Chlorotoluene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
108-67-8	1,3,5-Trimethylbenzene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
98-06-6	tert-Butylbenzene		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08
95-63-6	1,2,4-Trimethylbenzene		0.25	Not detected	ug/L	VANDREWS	RKELLING
<u> </u>	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
135-98-8	sec-Butylbenzene	-	0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			-	9/18/08	9/23/08
543-73-1	m-Dichlorobenzene (1,3)	<del> </del>	0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			•	9/18/08	9/23/08
106-46-7	p-Dichlorobenzene (1,4)		0.25	Not detected	ug/L	VANDREWS	RKELLING
	Method Reference	EPA5030/624/8260			ū	9/18/08	9/23/08

Sample ID

Collect Date:

Collect Time::

AB35629

09/17/2008

13:04

61077115FR

Location ID: Loc. Descr.:

WILLIAM BROWN

Visit ID

CAS# Analyte Name

	- Analyte M	anie	PQL	Result Qualifier	Units	Analyst/Date	Approved By /Date	
95-50-1	o-Dichlorobenzene (1,2)		0.25	Not detected	ug/L	VANDREWS	RKELLING	
	Method Reference	EPA5030/624/8260			· ·	9/18/08	9/23/08	
99-87-6	p-Isopropyltoluene	- · · · · · · · · · · · · · · · · · · ·	0.25	Not detected	ug/L	VANDREWS		_
	Method Reference	EPA5030/624/8260			- GFL	9/18/08	RKELLING	
104-51-8	n-Butylbenzene	· · · · · · · · · · · · · · · · · · ·	0.25	Not detected			9/23/08	_
	Method Reference	EPA5030/624/8260	0.25	Not detected	ug/L	VANDREWS	RKELLING	
						9/18/08	9/23/08	
96-12-8	1,2-Dibromo-3-Chloropro	opane	2.0	Not detected	ug/L	VANDREWS	RKELLING	
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08	
120-82-1	1,2,4-Trichlorobenzene		0.50	Not detected	ug/L	VANDREWS	RKELLING	
	Method Reference	EPA5030/624/8260			- Car	9/18/08		
91-20-3	Naphthalene		0.50	N-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t-t			9/23/08	
*	•	FD450000040000	0.50	Not detected	ug/L	VANDREWS	RKELLING	
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08	
87-68-3	Hexachlorobutadiene		0.50	Not detected	ug/L	VANDREWS	RKELLING	
	Method Reference	EPA5030/624/8260				9/18/08	9/23/08	
87-61-6	1,2,3-Trichlorobenzene		1.0	Not detected		<del></del>		
	Method Reference	EPA5030/624/8260	1.0	Hot detected	ug/L	VANDREWS	RKELLING	
		2.7.000.024/0200				9/18/08	9/23/08	

GROUNDWATER				(7)		Departm DIVISION OF	nent of Env	vironment and Natural Resources QUALITY-GROUNDWATER SECTION	
ocation code6107			SAMPLE TYP	<u>PE</u>	SAMPLE PRIORITY			Naa = = 0	
CountyRichmond	Water	$\mathcal{L}$	Routine		Lab Nu	Imber			
Quad No Ser .at Lor	ial No.		☐ Soil		Emergency	(115FR)	Lab Nu	o large	
.atLor	ng.		Other		,	(''' ''')	Date R	eceived 9/18/08 Time: 0.989	
·			□ Cha	in of Custody				By: H From:Bus, Courier Hand D	
Report To: ARO, FRO MRO, F	RRO, WaRO, W	/iRO,		ar or Gustouy					
VSRO, Kinston FO, Fed. Trus	t, Central Off., 0	Other:					Data E	ntry By: Ck:	
hipped by: Bus, Couried Han	d Del., Other:			Purpose	2:	_	Date R	еропеа:	
offector(s):BillTodd		— Date <b>09</b>	17/08 Tim	e1.04	Baseline, Complain	compliance, LU	ST, Pesti	eported:cide Study, Federal Trust, Other:	
IFI D ANALYSES			1-1-0-	_ ,	Baseline, Complain  William  Site ILS  of sampling point  ethod	(circle	e oné)	orac carry, v oderat must, Other.	
H 400	Spec Cond		ot 2590	Owner	William	_Brow	2	~	
H 400	_ Opec. Cond. C Odor	94	at 25°C	Location or a	site	Fruitlan	od r	Road	
ppearance		· ·		Sampling M	of sampling point	-00+2191	e to	10	
ield Analysis				Remarks	30100	Pumo payler, sig	1-201	Sample Interval	
y:BillTodd					·		Pumping time	air temp., etc.)	
ABORATORY ANALYSES						`	, 3	,,,	
BOD 310	mg/L	Diss. Solids	70300	mg/L	Ag-Silver 46566		ıg/L	Organochlorine Pesticides	
COD High 340	mg/L	Fluoride 95	1	mg/L	Al-Aluminum 4655	7	ıg/L		
COD Low 335	mg/L	Hardness:	Total 900	mg/L	As-Arsenic 46551		Jg/L	Organophosphorus Pesticides Nitrogen Pesticides	
Coliform: MF Fecal 31616	/100ml	Hardness (i	non-carb) 902	mg/L	Ba-Barium 46558		1g/L	Acid Herbicides	
Coliform: MF Total 31504	/100ml	Phenois 32	730	ug/l	Ca-Calcium 4655	,	ng/L	PCBs .	
TOC 680	mg/L	Specific Co	nd. 95	uMhos/cm	Cd-Cadmium 465	admium 46560		FCBs,	
Turbidity 76	NTU	Sulfate 945		mg/L	Cr-Chromium 465	E0.	ıg/L ıg/L		
Residue, Suspended 530	mg/L	Sulfide 745		mg/L	Cu-Copper 46562				
					Fe-Iron 46563		ıg/L ıg/L	Comingly 0	
		Oil and Gre	ase	mg/L	Hg-Mercury 71900	\	ig/L	Semivolatile Organics	
pH 403	units				K-Potassium 4655	6	ng/L	TPH-Diesel Range	
Alkalinity to pH 4 5 410	mg/L				Mg-Magnesium 46	EE4			
Alkalinity to pH 8.3 415	mg/L				Mn-Manganese 46	566	ng/L X	Malania O	
Carbonate 445	mg/L	NH <sub>3</sub> as N 6	10	mg/L	Na-Sodium 46556	<u> </u>	<del>'3'</del>	Volatile Organics (VOA Bottle)	
Bicarbonate 440	mg/L	TKN as N 6	25	mg/L	Ni-Nickel		ng/L	TPH-Gasoline Range	
Carbon dioxide 405	mg/L	NO <sub>2</sub> + NO <sub>3</sub>	as N 630	mg/L	Pb Lead 46564		ig/L	TPH-BTEX Gasoline Range	
Chloride 940	mg/L	P: Total as	P 665	mg/L	Se-Selenium		ig/L		
Chromium: Hex 1032	ug/L	Nitrate (NO:	as N) 620	mg/L	Zn-Zinc 46567		ig/L		
Color: True 80	cu	Nitrite (NO <sub>2</sub>	as N) 615	mg/L			g/L I A	B USE ONLY	
Cyanide 720	mg/L							mperature on arrival (°C):	
_ab Comments		•			<del></del>			1,0	